St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem"
—*Horace*, Book ii, Ode iii.

VOL. XL.—No. 10.] JULY 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Sat.,	July	1.	—Cricket Match *v.* Old Paulines. Away.
Mon.,	,,	3.	—Medicine: Clinical Lecture by Dr. Graham.
Tues.,	,,	4.	—Dr. Gow and Mr. Girling Ball on duty.
Wed.,	,,	5.	—Cricket Match *v.* R.N.C. Greenwich. Away.
Fri.,	,,	7.	—Dr. Graham and Mr. Vick on duty.
Tues.,	,,	11.	—Prof. Fraser and Prof. Gask on duty.
Fri.,	,,	14.	—Lord Horder and Sir C. Gordon-Watson on duty.
Sat.,	,,	15.	—Cricket Match *v.* Shoeburyness Garrison. Away.
Tues.,	,,	18.	—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Wed.,	,,	19.	—Cricket Match *v.* St. Anne's. Away.

Last day for receiving matter for the August issue of the Journal.

Thurs.,	,,	20.	—Cricket Match *v.* Midhurst C.C. Away.
Fri.,	,,	21.	—Dr. Gow and Mr. Girling Ball on duty.
Tues.,	,,	25.	—Dr. Graham and Mr. Vick on duty.
Fri.,	,,	28.	—Prof. Fraser and Prof. Gask on duty.

EDITORIAL.

AT such an important time in the life of our Medical College, it seems appropriate, though perhaps impertinent, if we ask what precisely is the object of the future Medical School, equipped with costly laboratories, and possessing an efficient staff of lecturers and professors? Does it hope to produce men who will be good doctors, or does it set out to teach no more than the principles of the many sciences and "'ologies" which form material for the examinations through which students have to pass to become "registered medical practitioners"?

The object of medical education is clearly to give students an adequate knowledge of disease and its treatment which will enable them to practise the art of Medicine efficiently and successfully. The present curriculum does not appear to have such a definite object in view; certainly it produces "registered practitioners", but the equipment of the practitioner does not seem to be sufficiently catered for.

The dissatisfaction among teachers and students with the curriculum has long been obvious. The late Sir William Osler, when writing on medical education over twenty years ago, said: "Perfect happiness for student and teacher will come with the abolition of examinations, which are stumbling-blocks and rocks of offence in the pathway of the true student". At a meeting of the St. Mary's Hospital Medical Society, held last year, the following resolution was passed: "That the present system of medical education does not produce an efficient practitioner". In Edinburgh, at a meeting of the Students' Union, a resolution was passed unanimously that "The present system of medical education in this country is unsatisfactory". Dr. Graham Little, in a recent letter to the *British Medical Journal*, points out how it is hoped to improve the curriculum, and he concludes by saying: "Whatever may be the solution ultimately adopted, I hope I have made it clear that it is high time, in the interests both of the public and of the profession, to overhaul our present practice".

Dr. Lindsey Batten in our last issue contributed an article on the "Aims of Medical Education"; in the present issue he has expressed his views on the methods which should be adopted in the future. We would like to congratulate Dr. Batten for suggesting such revolutionary ideas, and hope that they will bear fruit in the ideal curriculum which is now so much under discussion.

COLLEGE APPEAL.

The Dean writes:

28th June, 1933.

DEAR MR. EDITOR,

Since my last letter to you on the subject of the Appeal, nothing has occurred which would especially interest your readers. Our funds are slowly increasing, but there has been no such influx of subscriptions from old Bart.'s men as I had hoped for. I am very disappointed, for there are still a considerable number who have not yet subscribed.

It is well that old Bart.'s men should be informed of what is happening.

At the moment we are considering how the present buildings can best be utilized for our purposes. This will naturally require very careful investigation. In the meantime we are making a determined effort to get money from other sources, and we hope soon to be able to report that we have met with substantial success.

I am afraid I have nothing else to say on this occasion.

Yours sincerely,

W. GIRLING BALL,

Dean of the Medical College.

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COLLEGE APPEAL FUND.

	£	s.	d.		†
Staff	12,134	15	9	(68)	
Demonstrators	1,504	1	0	(65)	
Students	449	14	9	(251)	
Old Bart.'s men:					
Bedfordshire	5	10	6	(2)	(26)
Berkshire	86	1	0	(13)	(37)
Buckinghamshire	64	14	0	(8)	(29)
Cambridgeshire	154	13	0	(11)	(42)
Cheshire	1	1	0	(1)	(26)
Cornwall	22	2	0	(5)	(36)
Cumberland	5	0	0	(1)	(6)
Derbyshire	19	14	0	(4)	(17)
Devonshire	449	19	0	(41)	(117)
Dorset	16	8	0	(8)	(30)
Durham	16	6	0	(3)	(11)
Essex	225	15	6	(15)	(69)
Gloucestershire	123	4	0	(8)	(66)
Hampshire	393	1	0	(37)	(134)
Herefordshire	12	7	0	(3)	(11)
Hertfordshire	62	10	0	(10)	(73)
Huntingdonshire					(1)
Isle of Wight	135	8	0	(9)	(25)
Kent	526	13	0	(60)	(146)
Lancashire	33	7	0	(10)	(82)
Leicestershire	133	12	0	(6)	(28)
Lincolnshire	42	3	0	(12)	(25)
Middlesex	371	13	0	(15)	(68)
Norfolk	159	7	6	(18)	(60)
Northamptonshire	54	4	0	(4)	(17)
Northumberland	101	1	0	(2)	(11)
Nottinghamshire	13	13	0	(2)	(28)
Oxfordshire	166	10	0	(14)	(29)
Rutland					(2)
Shropshire	30	4	0	(7)	(22)
Somersetshire	449	6	0	(22)	(43)
Staffordshire	63	13	0	(5)	(37)
Suffolk	262	1	0	(15)	(46)
Carried forward	£18,289	13	0		

	£	s.	d.		
Brought forward	18,289	13	0		
Surrey	409	11	0	(39)	(180)
Sussex	229	10	0	(39)	(170)
Warwickshire	176	18	0	(16)	(56)
Westmorland	1	0	0	(1)	(5)
Wiltshire	92	11	0	(10)	(26)
Worcestershire	142	8	6	(17)	(27)
Yorkshire	254	19	6	(19)	(101)
Wales	32	11	0	(8)	(150)
London	2,439	15	8	(147)	(971)
Channel Islands	10	0	0	(1)	(9)
Scotland	12	2	0	(3)	
Abroad	38	5	0	(7)	
South Africa	268	15	6	(15)	
Canada	90	2	10	(6)	
East Africa	61	6	0	(5)	
West Africa	145	10	0	(4)	
India	122	0	0	(3)	
Syria	2	2	0	(1)	
U.S.A.	5	0	0	(1)	
Ireland	14	14	0	(3)	
North Africa	1	0	0	(1)	
North Borneo	5	5	0	(1)	
Australia	1	1	0	(1)	
Egypt	2	2	0	(1)	
Malay States	6	0	0	(2)	
China	35	2	4	(6)	
France	50	0	0	(1)	
Trinidad	20	0	0	(1)	
British West Indies	23	1	0	(3)	
Services	493	14	0	(25)	
*Others	18,079	5	7	(167)	
	£41,555	**5**	**11**		

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0
St. Bartholomew's Hospital Reports	250	0	0
The Haberdashers' Company	50	0	0
The Goldsmiths' Company	500	0	0
St. Bartholomew's Hospital Women's Guild	627	10	9
St. Bartholomew's Hospital Governors	469	7	0

† Number of Bart.'s men in County.

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OLD STUDENTS' DINNER.

The Old Students' Dinner will be held this year on Monday, October 2nd, in the Great Hall of the Hospital. Lord Horder of Ashford will be the Chairman, and it is hoped that as many old Bart.'s men as possible will be present.

A large and representative attendance is specially desired, for the occasion will provide an opportunity to celebrate the acquisition of the Charterhouse Square site and the beginning of a new era in the history of the College.

The site will be open for inspection by any who desire to see it.

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We offer congratulations to G. W. Thomas on being awarded the British Medical Association's prize in

Group 12 of the annual competition. We have been informed that the Council of the British Medical Association has decided to offer for award in June, 1934, prizes for short clinical papers by fourth and subsequent year students under the heading, "Describe Three Cases you have seen of Acute Intestinal Obstruction, discussing Diagnosis and Treatment". The medical schools of the British Empire have been divided into groups, and a prize of £10 is offered for each group. Further details can be obtained from the British Medical Association, Tavistock Square, W.C. 1.

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We congratulate the Athletic Club on their magnificent success in the Inter-Hospital Sports.

OBITUARIES.

SIR WALTER MORLEY FLETCHER, K.B.E., C.B., M.D., D.Sc., F.R.C.P., F.R.S.

THE loss to medical science through the death of Walter Morley Fletcher, before he had completed his sixtieth year, will be felt far beyond the limits of this country. Until the middle of 1914, a month or two before the outbreak of war, Fletcher had seemed to be fixed in his academic career at Cambridge, where his only contact with medicine had been through his work on fundamental problems of the contractile metabolism of muscle, on the borderland between physiology and biochemistry. He had, indeed, completed a medical course and qualification some fourteen years earlier, taking the clinical part of it at Bart.'s in the years from 1897 to 1900. We may be sure that he gave to these clinical studies that concentration of a fine and critical intelligence, which he could so rapidly bring to bear on any problem. Any ideas, however, which he may have entertained of practice in medicine or surgery were early put aside, in favour of a return to Cambridge and physiology. Even during his Bart.'s period, therefore, his interests were still largely in Cambridge, and when he returned there in 1900, to take up the life of a resident Fellow and College Lecturer at Trinity, becoming a Tutor in 1904, it seemed that the brief contact with practical medicine would give him, at the most, a stimulating memory and a wider background of experience for the pursuit of academic physiology, by his own researches, and later, in those also of the distinguished pupils whom he inspired. But though his personal contact with clinical work was thus brief, it widened his horizon and gave him a definitely medical outlook; and Bart.'s claimed thereafter a place, second only to that held by Cambridge and Trinity, in the affectionate loyalty which Fletcher so readily gave to the homes of great and venerable traditions.

The opportunity which came to him in 1914, just as his ten years of College tutorship were coming to an end, transformed at the same time Walter Fletcher's career and the whole aspect of medical research in this country. It is of but little interest now to discuss how far the opportunity discovered the man, or the man made the opportunity. We may, in any case, be thankful that the two came together at the right time. The Medical Research Fund, then a new by-product of the National Health Insurance scheme, and the creation of the late Sir Robert Morant more than of any other man, might have found another secretary with knowledge of men and of affairs, and, perhaps, with more conventional ideas of administrative routine than Fletcher had, or, indeed, than he ever acquired. But in Fletcher the natural *flair* for organization and control by personal influence and enthusiasm rather than by machinery was found in a rare, even in a unique association with a first-hand knowledge of the real meaning of research, and of the psychological as well as the material needs of the research worker, whether in the University laboratories or the Hospital clinics.

To Fletcher his new secretarial duties provided not so much an office as a mission. He had only just taken them up when the war broke out, and immediately put his powers of organization, of initiative and of brilliant improvisation to the most exacting test. It would have been so easy, and so wrong, to suppose that research could be put aside to wait till the war had been won. Few, if any, but Fletcher would have grasped so immediately the new and urgent needs for research which the war created. By the time it ended, the Medical Research Fund had won recognition as one of the indispensable factors of national recovery and reconstruction. The only questions concerning it were of its enlargement, and its reconstitution on a more stable basis under the Privy Council. The name of Fletcher, as the chief organizer of its successful application, was on the lips of all the men who knew. He had nearly lost his life in the achievement. Pneumonia struck him in 1916, after a period of reckless overwork. An empyema followed, and though it healed, and his magnificent physique seemed to have triumphed, there was left in the scar a lurking danger, to which, after these many years of further brilliant activity, he has at last succumbed.

Fletcher, after the war, became not merely the organizer of medical research for the service of peace; he became its apostle. He appeared as the effective

champion of the needs of the research workers and of their claims to recognition. He was the fervent and tireless exponent of the meaning of medical research, and, widening his scope, of biological research, for the health and the happiness of mankind.

Fletcher's death will be mourned, and his life and personality held in affectionate memory, in many circles —in official circles, where he moved with a still growing distinction and influence; among friends with whom he shared intellectual and artistic interests of remarkable range and variety; among other friends with whom his common ground was that of athletics, or of the pleasures and sports of country life. Among none, however, will there be a deeper sense of a loss beyond repair than among the men and women working in the field of medical research. To practically every one of these this brilliant and distinguished man was a close friend, always ready to spare time from public duties or social demands, more than enough to fill an ordinary life, for critical appreciation and generous encouragement of the humblest genuine and single-minded effort to add to the knowledge on which medicine is built. A driving force, a missionary zeal, has gone before its due time from the great cause of the advancement of medical science; and I believe that Walter Fletcher would like to be remembered at Bart.'s, as one whose equipment, for the great work of his mature life, was completed by the brief years during which the old Hospital was his second *Alma Mater*. H. H. D.

Dr. NORMAN E. COOK.

IT is with deep regret that we heard of the death of Norman Cook on May 11th from septicæmia, after a brief illness. To those of us who knew him and remember his unique personality it comes with a sense of great loss.

He was educated at Highgate School, and entered St. Bartholomew's Hospital in October, 1922. He qualified M.B., B.S. in December, 1928, and took a house appointment at the Mildmay Hospital. As he had always wished to go abroad as a missionary he took the D.T.M.&H. in 1929.

Naturally good at all games, he excelled at cricket—he captained the Hospital side for two years and played for the United Hospitals and London University. He was also captain of the Fives Club, and was in the first pair during the whole of his time at the Hospital.

In 1930 he went to Zaria, Northern Nigeria, under the C.M.S. and built a hospital there, where the work has recently been most encouraging in every way. He had recently established a further dispensary up country, and his work was held in high esteem both by the natives and the Government officials.

His unfailing courtesy and genial good humour remain with us as among his outstanding characteristics. But there was more than that—he was a very fine Christian gentleman, and we may say of him, as Chaucer wrote, "First he wroghte and afterwards he taughte".

RONDEAU.

On a/c.

THIS tailor's bill, as I've heard say,
Man's wont to cast unscanned away—
Discharging first, whate'er their size,
His other liabilities—
A quaint, withal a callous, trait!

The check in black or brown or grey
He dons, but to some distant day
Defers the cheque that satisfies
His tailor's bill.

Thus Man. And Woman also? Yea,
She's sinner double-dyed. But stay!
One dame, demure, devoted, wise,
Exception to the rule supplies:
Our kindly Ma would fain defray
Before sartorial display
Her Taylors' bill.* C. ap Peele.

* We understand that the Dean is not unwilling to receive cheques on the lady's behalf.—ED.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Nursery Times—Charing Cross Hospital Gazette—Guy's Hospital Gazette—Magazine of the London Royal Free Hospital—Middlesex Hospital Journal—Queen's Medical Magazine—Royal Dental Hospital Magazine—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Student—University College Hospital Magazine—University of Leeds Medical Society Magazine—University of Toronto Medical Journal—Sydney University Medical Journal—Clinical Journal—East African Medical Journal—The General Practitioner—The Hospital—Bulletins et Mémoires de la Société de Médecine de Paris—L'Echo Médicale du Nord—The Medical Forum—The Medical Press and Circular—Medical Times and Long Island Medical Journal—Post-graduate Medical Journal—Reale Società Italiana D'Igiene—Revue Belge des Sciences Médicales—Archives Hospitalières—The Bombay Medical Journal—The Quarterly Journal of the Research Defence Society—The Keijo Journal of Medicine.

AIMS AND METHODS OF MEDICAL EDUCATION.

II. METHODS.

IF a committee of enlightened men were appointed to devise a new curriculum, having as its single aim the training of men to become good doctors, can we guess how it would set to work and what it would recommend? It is at least entertaining to try. We will suppose it a committee of five: a physician, a surgeon, a general practitioner, an intelligent layman to represent patients, and an experienced schoolmaster, or the tutor of a college to represent education, each one of them a clear-sighted man of independent mind.

Having met and chosen their chairman, they sit down to discuss, as a necessary preliminary, the functions of a doctor and the qualities and attainments which make him a good one.

What is required of the doctor?

First he is required both by public bodies and by private individuals to give advice about health and its maintenance. Public bodies make him a medical officer of health, set him to inspect school-children or candidates for the Services, to advise mothers, actual or expectant; insurance companies demand his opinion as to expectation of life; private patients bring their children or come themselves for overhaul and for advice on matters of personal hygiene. Work of this type is increasing, and must increase, for, taken as a whole, it is probably more successful than most branches of curative medicine. The time is long past when the doctor could assert or suppose that his concern was only with the sick.

There is a hoary myth that in sickness the patient is concerned only about his treatment. This is not so. The patient, rich or poor, wishes to know the diagnosis and the ætiology—what is wrong and how it came about. If he does not ask it is from politeness, shyness, or fear of being snubbed (this especially in hospitals), or from fear of learning the truth, which, even so, he wishes to know. As to prognosis, the patient is less insistent than might be expected, but treatment he very properly demands, though his ideas of good treatment may differ widely from his doctor's. It seems likely that some two generations ago diseases were widely regarded as inevitable, if not actually "sent"—things to be endured with patience, and whose outcome was not in human hands. At that same period the doctor, in the dawn of modern science, preached the specific cause, and hoped confidently for the specific remedy based thereon. Now the position is almost reversed. The patient believes implicitly in a specific cause for every phenomenon, and is inclined to think that if it has not yet been found it cannot have been seriously looked for. He has faith in remedies, but sadly little in the "*vis medicatrix Naturæ*", which he is apt to regard as the superstition of a bygone age. The doctor, watching both diseases and theories run their course under his eyes, finds reason to distrust both specific causes and specific remedies, but to believe in the human organism's power of recovery, given a reasonable chance. The result of all this is that if patients are to be treated as they ought to be and the doctor is not to be led into false courses, he must be ready to give convincing reasons, both for what he does and for what he declines to do.

Briefly, then, the doctor's functions are to advise the healthy on the maintenance of health and the prevention of disease, and to adjudicate between health and not-health, to advise the sick as to the nature and, when possible, the cause of their maladies, and to set them on the best and nearest way to recovery, interfering or not as may be best for them.

What does he require to perform these functions well?

First, of course, he must be a good man, and here the curriculum can have little to say. Next he must have a clear head, and here it can do much, for better or for worse. If, for example, it insists that at the age of sixteen the intending medical student shall abandon general education for the acquisition of technical knowledge, it powerfully discourages clearness of thought and expression, to say nothing of breadth of view, in the finished medical man.

The temptation to confused thinking is almost overwhelming. As if the problems set by Nature were not enough, the doctor is invited daily by patients, by commercial firms, by little periodicals and pamphlets from unknown quarters to accept false analogies, uncontrolled experiments, muddled reasoning, dogma, and even gross misstatement as substitutes for observation and thought. The love of accuracy which comes of good scholarship would by itself go far to protect him. A wide but shallow acquaintance with many sciences and an unreasoning acceptance of facts for examination purposes strip his armour from him.

Next he must have a philosophy—of life in general, and of medicine in particular. He cannot practise without one. For example, if he has the clear head already postulated, he will soon find that he must decide whether he believes in "Man, a machine" or in "Man, not a machine". In one of these two faiths he must work, and in case after case, not only his treatment, but his diagnosis will be determined accordingly.

To supply him with a philosophy ready-made is not the province of the curriculum, but it has the duty of

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supplying the facts on which to build one, and that without reserve and without bias.

It is sometimes thought that the doctor is primarily concerned with disease, but, outside the laboratory, this is not so. From first to last the practising doctor, specialist or no, is concerned with human beings either in or out of health. Pneumonia and appendicitis exist as tangible entities no more than anxiety neuroses. What exists, and what must be treated, is a patient suffering from one of these conditions. Tumours come nearer to independence, but, thank heaven, we do not yet speak of " tumour specialists ". It seems but right, therefore, that the doctor should have something more than an anatomical acquaintance with the human material in which he is to work. A " vet. " whose knowledge of horses was confined to their internal anatomy and physiology, their pathology and the medicaments suited to their ailments, but who knew nothing of horse-mastership or of horses " in the round ", would be an unusual and probably an unsuccessful kind of horse-doctor. Should not the human doctor, entering practice, be conversant with the common physical and physiological types of men, with the phenomena of growth, puberty and age, with the influence of diet, habits, occupation and environment on ordinary men, women and children, with the power and limitations of inheritance, and above all with the extent of individual variation and the limits of the normal? Should he not, in fact, have a reasonably thorough knowledge of human biology and of clinical anatomy and physiology?

Apart from this a fairly extensive knowledge of the structure and mechanisms of the human body, that is of anatomy and physiology in the accepted sense, is obviously necessary. That the details of these subjects will soon be forgotten is, in itself, no reason for not learning them if they are essential to a good understanding of structure and function; but there are some facts in both subjects which appear to be almost barren, not only of clinical application, but also of vital significance, and these, until and unless they come to have such significance, it would surely be better not to learn. To have been able, once, to name all the structures in the human body, to have been able to map the cerebral convolutions, or to identify every carpal bone and phalanx, to enumerate the branches of the internal maxillary artery, to give an exact account of the reflexions of the pericardium or of the minute structure of striped muscle or of peripheral nerves, to have been able to recite the list of the purin bodies in the urine or of the pigments of bile, urine and fæces—these and other such accomplishments assist a man to be a good physician scarcely more than to have been a fine performer with the yo-yo. They neither help him to understand what he is dealing with nor inspire him to think. For the anatomist or physiologist the facts concerned have some significance, for the clinician or future clinician they have none, or next to none.

Rather less unprofitable are such occupations as following (at a distance) the pursuit of the urinary creatinin back through the mazes of metabolism to its obscure first origin, or critical examination of the ingenious theories of colour vision. Such exercises, whether for giving some idea of the mechanisms of the body or for pressing home the lesson of the 38th chapter of the Book of Job, are not without value for the future doctor, yet, for a young man with a short life trying to learn a long art (at his father's expense) and pressed for time, they are something of a luxury, and it is possible to become a most excellent practitioner without either knowing or having known anything whatever about them.

To have taken part in one small but genuine research would be of infinitely greater value.

Pathology is in the same position. The doctor should have a sufficient grasp of its principles to be able to think out a clinical problem in pathological terms. He should know enough of the specific pathology of diseases to picture intelligently what is going on beneath the surface; he should understand the use of the microscope as a first aid in diagnosis. But the niceties of bacteriology and morbid histology have no significance for him, and the " spotting " of sections and cultures or the memorizing of sugar reactions are, for the future doctor, vain and irrelevant exercises, and a most lamentable waste of time.

But in this matter of the accessory sciences the crux is chemistry. A knowledge of elementary physics is obviously essential, and no clamour to extend it is audible at the moment.

The position of biology seems to the writer unassailable. Apart from its obvious claim to a place in the education of anyone who is to deal with living beings and with vital processes, it is a science comprehensible by ordinary intellects, it stimulates imagination and thought, and in learning it the student takes the first steps to acquiring surgical technique. Again, there is no talk of extending the course in biology, but rather of curtailing it. It is otherwise with chemistry.

Here is the science which has made, in the last generation, the most prodigious advances. It has linked itself to physics, and it pauses not for an instant; it explains vital processes, it dissects and compounds drugs, it devises new therapies and rationalizes old ones; it can almost be heard proclaiming that it is about to revolutionize medicine. How far is a study of this science essential to the making of a good doctor? How much chemistry should the student learn?

Not very long ago the answer would have been easy. "The student must learn enough chemistry to give him a clear insight into metabolic processes, normal or deranged, and a knowledge of the nature and properties of the chemical bodies employed as drugs".

This still sounds very reasonable. The trouble is that knowledge has advanced so fast and so far, and the synthetic and manufacturing chemists have evinced such ingenuity and enterprise, that the connotation of the word "enough" in this context has completely changed. A generation ago the knowledge of these subjects which could be imparted to and absorbed by ordinary medical students in the time available did bear some kind of proportion to the sum of such knowledge then existing; now it bears none, so that a more intelligent answer to the question might well be "either a great deal or very little", with the corollary that the first alternative is for the few with a natural aptitude for the subject, the second for the many; (for it will probably be conceded that the kind of man who is attracted to medicine has, as a rule, little aptitude either for mathematics, or for the formulæ and equations of the physical sciences). The time may come when one sufficiently expert in the science will be able to picture accurately the biochemical basis of a given clinical picture, and by skilful chemical intervention to re-establish disordered balance or favourably deflect the course of events. Occasionally it can already be done, but not often, and, if the rate of progress towards effective specific therapy based on bacteriology and cellular pathology may be taken as a guide, "the time" need not be expected just yet. If and when it comes, both the curriculum and the intellectual bent of those entering the profession will have to change. Meantime is there really any need for more than a few "biochemical doctors"? May not the average medical man, without loss of self-respect, confess that "such knowledge is too wonderful and excellent for him; he cannot attain to it".

This will be much better, both for him and for his patients, than to attempt to be clever with a smattering. What the doctor needs in this connexion is not technical knowledge, but an understanding of the nature of scientific evidence, and a faculty for assessing the worth of different sources of information.

The recent, and widely accepted promotion of the transient biochemical state of acidosis to the status of a chronic disease of childhood, to be diagnosed without chemical evidence on a symptomatology which would put Proteus to shame should make both biochemists and clinicians pause and think before they endeavour to popularize biochemistry among the profession.

But this thesis is, alas, the very reverse of that of the President of the General Medical Council, who sees it as the duty of that body "to press for the very thorough grounding of the student in chemistry, and, more particularly, in biochemistry, as a part of his professional curriculum". There is no space to pursue the argument, but the prospect of the whole body of medical men trying to think biochemically induces in the writer only a sinking of the heart, a sinking like that induced by the picture (also held up for his admiration) of a brave new world whose citizens, having worked three hours a day, devote eight or ten to the Cultivation of the Mind and the Pursuit of Higher Things. Moreover, even if the ideal be accepted, is it not certain that in practice it will be attained at the expense of general education (for there is no hint of sacrificing any other of the accessory sciences), so that before long what was once a learned profession will become an association of uncultured and half-educated technicians? Put it that it will become almost impossible for any schoolboy to pursue his classical studies up to sixth form standard or to become even moderately proficient in Greek if he wishes ever to practise medicine: is that a light matter for the profession?

But to return to our committee and their doctor They will easily agree that he must be able to examine his patients, and they may well think that even at the outset of his career he should be able to inspect (with a suitable "scope"), the eye, ear, nose, larynx, rectum and cervix uteri, and to tell if what he sees there is normal or no; they may think he should know something of the teeth, both clinically and radiographically, and that though he need know nothing of radiology, he must be able to read radiograms. But when they inquire they may find that a student would feel himself very ill-used if, despite a fine knowledge of acid-base equilibrium, he found himself handsomely ploughed in his finals for total inability to see what was going on in the tympanic membrane, the larynx or the cervix.

When they turn to diagnosis they will find a subtle difference existing between the meaning this word has for the student and for the practitioner. For the student (and, very largely, for the teaching hospital) it means fitting a name to the patient's disease—"this is a case of aleukæmic leukæmia". For the practitioner (and for his patient) it means discovering the nature and cause of the trouble—"this patient, who complains of cough, loss of weight, anorexia and extreme fatigue, is suffering in part from infection of the left antrum, in part from fear of tuberculosis, and in part from an over-anxious mother who has prevented her from growing up".

When practitioners complain that they are not well prepared as students to recognize these nameless complaints, answer is made that the student must walk

before he can run, and that he is not in fact ready for such instruction. No doubt to diagnose such a case, greater maturity of judgment is needed than to diagnose, say, subacute combined degeneration, but suppose the student does encounter it (and the patient *might* have gained admission to a medical ward), is it right that he should be taught to regard as complete the diagnosis of "maxillary sinusitis, with a large functional element"? Is it well that he should never encounter such cases in his finals, and that if he did the word "functional" should be his full and sufficient discharge from the obligation of investigating the patient's state of mind?

A recently published paper, read to general practitioners by a consulting physician, begins thus: "About half the patients who are sent to me for anæmia have a normal blood-count. They are not suffering from anæmia, but from debility, very often psychological in origin. An unhappy love affair does not require treatment with liver extract, but I have seen it prescribed in more than one such case on a mistaken interpretation of the symptoms as anæmia". Why should it be common for practitioners to make such a mistake? Is it not because, first, they have been inculcated with a materialistic conception of medicine; second, they have not been encouraged to reason clearly, and to use words accurately; and third, they have not been taught to examine their patients completely. They would not have made the wrong diagnosis if, in their ward clerking, they had been made to use a hæmoglobinometer in the routine investigation of all their patients; and they would have made the right one if the power of emotional disturbances to cause physical symptoms had been consistently pointed out to them in their clinical work. No special course in psychology would have been needed. More instruction in chemistry or in any other accessory science would have helped them not a whit.

Why did they prescribe liver extract instead of iron on a diagnosis of "anæmia" (*tout court*)? Partly, it may be, from a desire to be "modern", partly from having listened too long to the siren songs of the manufacturers, but at bottom from lack of clear thinking.

Turning to treatment the lay members of the committee will point out with surprise how very small a place it occupies in the curriculum, and on inquiry it may be found that the young man's ideas on this subject when he leaves his hospital are both sketchy and confused, and that he has no conception of its importance, so that while some of his patients are confusedly over-treated, others are sadly neglected. In particular the gentle contempt shown in hospital education for that wide and important field of treatment which it dubs "merely palliative" may seem almost tragically misplaced, for while "cures" are few and far between and the word "cure" might well be forgotten by the doctor, there are very few conditions in which he can do nothing either to assist recovery or to alleviate suffering. Further, our committee may be distressed to observe that it is quite possible for the doctor to go out into the world unable and, indeed, afraid to use his hands in the practice of his art, so that, for want of a timely myringotomy, his patients go on to mastoiditis, and he may be sorely tempted to call in the village bonesetter to "unstick" a lumbo-sacral strain.

What, then, will be our committee's positive recommendations?

They will first point out that the curriculum they propound has but one purpose; it will be designed to enable medical men, whether in public or private, special or general practice, to render the maximum of good service to their fellow citizens. It will not be intended for the medical scientist, for whom, though it might give him breadth of view, it will be in many ways unsuitable. It will be based on the principle that for any kind of practitioner ability in thought and action are of more value than knowledge, and that the two great essentials for him are general education and clinical training. It will follow that since the available time and the capacity of the student's mind are limited, there must be excised from the sum of facts which he is compelled to learn all such as merely burden the memory and do not assist understanding or thought. Away will go the details of chemical manufacture, a host of anatomical names, some details of botany, numbers and percentages wherever they occur almost without exception, the most part of morphology, whether cellular or microbic, and a certain amount of morbid anatomy. Further than this, some facts, such as those of biochemistry, whose theoretic importance is indisputable, but which can be grasped only after prolonged special study, and are then not easily retained, will, as a matter of common sense and reasonable compromise, give up their place to other subjects of greater practical value. The minimum requirement in chemistry will therefore be small, but it might be made compulsory for the "First M.B." candidate to offer either additional chemistry, a language or mathematics as alternative subjects. In the final examination, at least for the higher degrees, a question in biochemistry would be set as an alternative to one in psychology, and the candidate would have the chance of taking a course in one of these two subjects in the clinical stage of his work, when the application of what he was learning would be apparent to him.

The schoolboy and his teachers would thus be given their freedom to carry his general education to its natural fruition, and the student could begin his professional studies equipped perhaps with one or more

modern languages, with the trained mind of the classical or mathematical scholar, with an unspecialized education in science if his aptitude lay clearly in that direction or, at the least, with some general culture.

The clinical aspects and applications of anatomy and physiology will be kept clearly before the student while he is studying these subjects, and the line between the clinical and preclinical phase will be partly obliterated. He will study radiographic anatomy stage by stage with that of the dissecting-room; and will study the normal intestinal movements with the help of the fluorescent screen; he will go from the anatomy to the post-mortem room to correct his distorted impressions of the viscera; he will learn the arts of physical examination during his physiology course, and will be made to observe and describe selected abnormalities in the fundus, heart, larynx, urine, and so forth partly to give significance to what must otherwise appear a dull and empty exercise, partly to introduce him to his life-long task of defining the limiting boundary of the normal. It should be possible at this stage to give him a share in some small piece of research into clinical physiology, and to bring home to him the evasiveness of truth, the necessity for controls, and the relation of the unknown to the known. He should enter the wards with a good knowledge of normal human beings in their physical aspect, and should not be shocked to find that they do not behave like machines, or like laboratory animals; he will have learnt to use eyes, hands, ears and diagnostic instruments, and will be already familiar with some of the physical signs of disease. In the wards the conception of the patient as an indivisible whole, as a sentient being and as the unit in clinical work will be diligently taught until the expression "he is a case of" is heard no more. Any tendency in the student to specialize will be rigidly suppressed; he will be taught that he is engaged upon a general training, that if he seriously wishes to take up a special branch of work he must postpone it until well after qualification, and that even then he is likely to make a very much better specialist if he first engages in general practice. The cult of the rare will also be coldly regarded, and examinations will be so framed and conducted as to discourage it. Evidence of thought and of original observation will, on the other hand, be marked high, and it is probable that an essay will be demanded of the candidate at least in his final examination.

Much of the time now spent in operating theatres and in lecture-rooms and some of that spent in laboratories will be transferred to the special departments, where the student will learn both to diagnose and, more particularly, to treat the common regional diseases and disorders. The student's connexion with and responsibility for his "case" will not, as now, cease at diagnosis, but will continue at least during the period of active specific treatment; he will be expected to know its details and, where possible, to carry it out himself. He will thus see fewer conditions, but will know far more about them and about the details and limitations of therapy and, it is to be hoped, he will learn to use his hands.

Education in psychology will probably be given better by keeping constantly before him the fact that his patient is human than by any course of lectures, but instruction and practice in investigating the state of the mind (and the sane mind at that) should be perfectly possible to give, and might well take the place of instruction in the classification of the psychoses; also it should be possible to give to every student at least one convincing demonstration of the origin of bodily symptoms in emotional conflict and of their disappearance when the conflict is resolved. It is deplorable that he should go into practice unequipped to handle this daily problem.

At the end there should emerge a practitioner, inexperienced no doubt, but competent to examine his patients completely, familiar with a large number of common clinical pictures, alert in mind and ready to learn, conscious that his knowledge is small, but confident of his ability to help his patients, having at least the makings of a good doctor. L. W. BATTEN.

THE MEDICAL SEMI-DEMI-MONDE.

THE passage of time provides a double instruction; confirmation of the truth of earlier observations is obtained, and fresh material becomes available to the student of human social pathology. The stork-shooter, having barely escaped the game-keepers, has changed his profession for that of gooseberry-stealer. The dichotomist still flourishes, but the chiropractor communes no longer in Egyptian with Æsculapius.

Juvenal satirized the credulous folly of his times; Benvenuto Cellini describes how a quack physician came to Rome with a cure for the French evil, treated many wealthy ecclesiastics and went off with his fees, "which was as well for him as the symptoms returned soon after his departure."

Human nature never changes; the proportion of fools was never greater in a population than it is to-day in ours, and their influence, thanks to democracy and the modern newspaper, is stronger than ever. Where the fools are there shall the rogues be gathered together,

and rogues, or gentlemen whose desire for money is stronger than their consciences, are numerous inside the profession, especially where the orbits of medicine and flash society intersect.

Flash society eats and drinks too much, and loves irresponsibility. It must have mud-baths, weight-reducing electricians, beauty parlours, abortionists, venereal experts, and a pleasantly variable selection of quacks for its fads and boredoms; nor does orthodox medicine entirely scorn its fees for treatment of imaginary ills.

Not long since did there appear, by a process of presumably emergent evolution, a new therapeutic sect—the Orificialists. Every bodily port, whether of exit or of entrance, was their professed study; for what could be of importance to the human organism except those things which entered it or those that were dispersed from it?

Many and various are the votaries who subscribe to the common cult of orificialism.

A benign and rubicund old gentleman once accosted the writer at a scientific meeting: "Young man", said he, "do you know anything about diabetes?" "Well," was the reply, "I am interested in it". "I can cure it," quoth he. "I am writing a book on it. And by every post, from California, Australia, India—all parts of the world—come letters in confirmation of my discovery." "Oh, and what do you do for it?" "Potassium permanganate into the rectum," came the proud rejoinder.

A vision of purple streams, north, south, east and west, advancing rectally to their beneficent work, caused a momentary failure of critical judgment. After the vision had become a little dimmed: "What evidence have you?" "Well"—proudly and dogmatically—"I have had three patients, all of whom have been cured." "Oh, and what were their blood-sugars?" A pause, largely filled with scorn at the superfluity of such a question, was completed by a fear, quickly suppressed, that the criticism might be legitimate, and was followed proudly by—"Well, anyway, two of them saw the best man in London, and he said that they had diabetes". Many are the other complaints for which similar colonic blessings have been promulgated. The results are harmless, for of course the superabundance of reducing substances in the colon causes an immediate and complete local fixation of the permanganate.

This ancient orificial proselyte was a qualified medical man—and no doubt a commercial success. He believed in his nostrum, and resented and feared logical criticism. Another such, but possibly more malignant, is the gentleman who "disperses" gall-stones. This rather messy and profuse word is generally employed; its vagueness is readily accepted by the general public. There is, too, a suggestion of scattered battalions fleeing before a cavalry charge, which is flattering both to the doctor and to the patient's gut. The trick is to insist on the ingestion of enormous quantities of olive oil. After a period a dose of castor oil is administered and the "stones" collected and shown to the patient. The latter naturally prefers sight to touch, which is as well, for the stones are composed of soaps, tinted with bile and looking very like real gall-stones. For the sake of a fine climax to the treatment, this is frequently terminated by an enema. Instructions might be as follows: The patient should be placed in a nursing home—the importance of the occasion alone will demand this. At the end of the week he is transferred to a theatre; a surgical sister, nurses and an assistant are in attendance; the soap solution is tendered in a plated bowl; the enema nozzle is carefully inserted—it has previously presumably been carefully sterilized, for rubber gloves are worn. The "gall-stones" are meticulously saved and shown, and a fee of at least thirty guineas should be collected before the dramatic effect has cooled. Everyone is pleased—and if the patient's symptoms were not previously due to gall-stones he may never have another attack.

Another artistic manner of removing gall-stones is the use of canary-seed—though the identity of the remedy is not disclosed to the patient, there is a fitting suggestion of sympathetic magic about the association between both nostrum and disease and yellowness.

The patient is well starved for several days. Opaque capsules containing canary seed are given. During their intestinal pilgrimage they become aggregated into firm masses, closely simulating gall-stones, whose identity remains obscure until they are cut into.

Proceeding to other orifices we come to the mouth. In the neighbourhood of North London there practises a herbal specialist whose methods combine impressiveness with simplicity. All ills are due, so he says, to poisons which are intimately but widely disseminated throughout the body-tissues. According to their *rendezvous* so will the disease be localized.

If only they could be withdrawn into one place and expelled *en masse!* And this is what the clever fellow does. He concocts a brew of leaves of the Lesser Hag's Beard, Pimple-wort, Striped Bug-bane, Raddlesweet and Pimeny flowers. A quantity of this is swallowed by the patient on a full stomach. These potent herbs course through the veins and arteries, and like terriers dislodge and chase the poisons from their lurking places, shepherding them carefully into the stomach.

After giving sufficient time for this to have been effected, a second brew, this time nauseous, is drained.

The result is energetically emetic; and in his little curtained alcove the patient, urged to greater efforts by the vocalities of his fellows, is scoured of his ills. There can be no form of treatment more impressive; and the practitioner numbers among his clients, as is most appropriate, famous musicians.

There practises in a North Country town a trim lady, who cures and prevents colds. Her system is one that needs a lengthy explanation. An appointment is made, a general history of the patient is taken, and a commencement is made with the explanation of the treatment—fee three guineas. The patient comes a second time; the explanation is continued in detail—fee three guineas. A third appointment is made, and if the patient can afford it, he or she turns up. The explanation is concluded. Stripped of its many trappings the full treatment has two main essentials: snuff must be taken morning and night, and the patient must learn to blow the nose *à la* navvy.

In addition to her lucrative private practice, she keeps a number of children's schools free from colds. In these chosen institutions pupils may be seen periodically to hold up their hands. At a nod from the mistress they rise, tip-toe to the open window, take the nose delicately between finger and thumb, and, hey presto, the deed is done. People who are in the habit of passing in the street below wonder why they catch so many colds.

It would be possible to linger over the man with electric fingers, who puts cantharides on his horny skin; or to describe the "rack", valued property of its osteopathic owner, and the only one of its size and kind in Britain; or to tell of the magic blue flame that draws poisons from the tissues. But time presses.

Let us finish with the stalking-horses.

There exist, on the border-land of the demi-monde, a number of well-qualified medical men. Money soothes their consciences, and in any event they keep just within the law. Their source of income is the abortionist, the osteopath, and the quack of large calibre.

Should a curettage go wrong, they are ready to intervene with an ante-mortem legal operation. The osteopath is adequately covered if he has a tame but otherwise reputable surgeon or physician to whom he may send on those patients who have not responded to a reasonably long and expensive course of treatment. This enables him to take on as patients all and sundry without risk. It also ensures a reasonable overflow for his hack confederate of easy virtue. The stalking-horse is thus a valuable adjunct to quackery; and while he feeds from the stall he manures the field.

G. B.

SURGICAL APHORISMS.

1.

HIPPOCRATES, Gee, Horder—these are the names which the word "aphorism" recalls to the mind of any St. Bartholomew's man. The bias of these writers was mainly medical, but was based on a wide outlook, and no attempt to emulate them in the more restricted field of surgery is likely to be successful.

2.

An aphorism, if it is not to be merely platitudinous, must spring from individual experience and conviction. Surgical aphorisms must, therefore, be subject to the same limitations as the writer's experience, and will blossom most where his experience and interest is greatest.

3.

An aphorism is not merely a condensation of known facts. It must have something of originality, but depends for its virtue on manner as well as matter. Messrs. Wheeler and Jack were not writers of aphorisms.

4.

Surgery has often been proclaimed as an art, but it has in it nothing of creation, nothing of imagination, and it should be reckoned as one of the noblest of the crafts.

5.

Surgery demands qualities of mind which are not to be found in men of real artistic genius. Swift decisions, a certain ruthlessness, an assumption of responsibility for the persons and lives of other people—these have repelled the artist, whose means of self-expression require isolation and absence of responsibility.

6.

Surgery as a craft demands the practical hand and mind for its accomplishment. Seeing, touching, doing, are the three essentials for the education of the surgeon at every stage of his career.

7.

The craft of surgery may be developed up to the highest level of skill of which the human hands are capable, and therefore can satisfy to the utmost the skill-hunger felt by so many human beings.

8.

It is possible to make a fetish of surgical technique at the expense of judgment—a factor of enormous importance in determining the patient's safety. Yet every surgeon, without exaggerating its ultimate value, should never cease to strive after improvement of his technique. It will never be perfect.

9.

Dexterity and gentleness are two of the essentials in good surgical technique, and these may be acquired by hands that have the natural aptitude in a comparatively short time. But technique without judgment is naught, and judgment can only be acquired slowly and with infinite pains.

10.

Speed in a surgical operation depends, not on quick movements, but on the absence of unnecessary movements.

11.

A surgeon's movements should seldom be quick and never be jerky. He should never take his assistant by surprise.

12.

No suffering after an operation should ever be taken as a matter of course. If constant thought be taken how to minimize suffering, surgical technique will be steadily improved.

(To be continued.)

GEOFFREY KEYNES.

REMARKS ON SIMPLE GOITRE AND GRAVES' DISEASE.

THE PATHOLOGY OF SIMPLE GOITRE.

THE confusion which has existed, and in some circles still exists, in connection with the relation of the structural alterations of the thyroid gland to disease is due to a failure to appreciate the physiological responses and the labile nature of the gland-tissue. To meet the changing needs of the body for the iodine-containing hormone of the thyroid, there are rapid variations in the activity of the gland. Within a short period the histological picture may change from the resting phase, in which the vesicles are lined by cubical cells and contain abundant colloid, to one of activity—that is, hyperplasia, in which the gland is hyperæmic, the epithelial cells are columnar and the vesicles contain little or no colloid. Within a similarly short period, when the requirements of the organism for the thyroid hormone have decreased, the gland will return to the resting phase.

Marine (1) has shown that increased thyroid activity is associated with a decrease in the iodine store of the gland, provided the intake of iodine at such times is not correspondingly increased. The morphologically normal thyroid contains on an average about 0·2% of iodine (measured in terms of dried gland). When the iodine requirements of the organism for the iodine-containing hormone increase, the iodine store of the thyroid diminishes. If the iodine store falls below 0·1% of dried gland, the gland will become hyperplastic. As the iodine store progressively decreases the degree of hyperplasia increases, so that in the most marked hyperplasia, iodine is usually absent or present only in traces. Thus the iodine store varies inversely with the degree of hyperplasia.

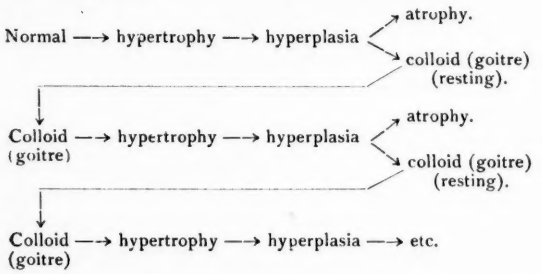
A gland which thus becomes hyperplastic is enlarged for three reasons: (1) The increased blood-supply, (2) the increased number of cells in each vesicle, so that in many cases there may be infoldings of the epithelium into the lumen, and (3) the formation of fresh vesicles by budding from already existing ones; this third cause is not accepted by some observers. The immediate stimulus for the occurrence of hyperplasia is always a decrease in the iodine content below the normal minimum of 0·1% of dried gland. This is true both for simple goitre and for the thyroid of Graves' disease. The hyperplasia is the same, no matter what the stimulus which brings about this preliminary depletion of the gland's iodine content, so that without taking into account the clinical findings, it is impossible to say from the section whether it is from a case of simple goitre or of Graves' disease.

If the stimulus persists, the hyperplastic gland eventually becomes exhausted and atrophy results, giving rise to myxœdema. This is also true both for simple goitre and for Graves' disease. It has been said that the occurrence of thyroid hyperplasia is the first step towards myxœdema. If, however, the stimulus is removed, or if iodine is given, the thyroid will involute; the iodine store will increase, the blood-supply will be diminished, colloid will be retained in the vesicles and the epithelium become flattened. Because of the previous increase in the number of cells in each vesicle, the vesicles will be larger than those of the normal gland, and because of the considerably increased volume of gland-tissue to supply the body's needs, there will be passive distension of the vesicles with colloid. In this manner a colloid goitre is produced. Such a gland has an iodine store of 0·1% or more, of dried gland, and is the nearest approach to normal that a gland which has

previously been hyperplastic can attain. The development of a colloid goitre from a normal gland by passive distension of the vesicles with colloid without previous hyperplasia is impossible. Virchow pointed out, in 1863, that the primary phase of all true goitres is active hyperplasia.

The process of involution may be arrested at any stage, and active hperplasia begin again, but not, however, until the iodine store has fallen below the normal minimal level. When hyperplasia occurs in a colloid gland in this way, the vesicles may still contain abundant colloid material, which, however, is poor in iodine (Marine, 1). Through alternating hyperplasia and involution large colloid goitres are formed. Further enlargement is also frequently produced by hæmorrhages into the gland. It is well known that appearances similar to those of a simple colloid goitre may be produced in the thyroid of Graves' disease by the administration of iodine. Thus, again, the histological appearances fail to tell one whether the section is one from a simple goitre or from Graves' disease.

Marine (2) has particularly emphasized the cycle of essential cell changes in the production of goitre, and has reduced it to the following scheme:



In the formation of nodular goitre (the so-called thyroid adenomata) the stimulus for growth is the same as that for diffuse goitre. There is no fundamental difference between a diffuse goitre and a nodular goitre, since all nodular goitres were in the beginning diffuse goitres. Nodules do not occur in glands which are not, or have not been, the seat of a universal hyperplasia (Virchow). Fully differentiated nodules, which may be of the hyperplastic or of the colloid type, usually arise through the two processes of repeated hyperplasia and involution occurring throughout the whole gland (Marine (3), Rienhoff (4)). These two processes, by eventually bringing about increase of stroma on the one hand and endarteritis on the other, lead to differences in blood-supply, whereby colloid retention cysts are formed. Between the cysts there may be islands to which the blood-supply is unimpaired, and which therefore may be hyperplastic. By continued growth these hyperplastic areas enlarge and assume a false capsule by pressure on the adjacent thyroid tissue. The enlargement of these areas is not necessarily due to any biological abnormality of the cells, but because a large amount of gland-tissue in the shape of colloid retention cysts is, as it were, out of action.

The less differentiated nodules (the so-called trabecular, tubular and microfollicular adenomata) arise by budding from a vesicle as a result of the general stimulation (Hitzig (5), Michaud (6)), but the epithelium has not the power to form normal vesicles in the usual manner. In this case there must be some biological abnormality of the cells; it is probably an exhaustion phenomenon following the prolonged stimulation. Occasionally fully differentiated hyperplastic nodules may arise in the same way, and by their enlargement acquire a false capsule by compression of the surrounding thyroid tissue. I have seen several sections showing gradations of the early stages of this budding. It is thought by some that the nodules may arise from interacinar fœtal thyroid rests, but in my opinion this is very doubtful. These nodules are not true tumours in the pathological sense, but occasionally they may approach being true tumours in that they sometimes continue to grow after growth of the rest of the thyroid has ceased.

The longer the individual has had a goitre, the more likely is the goitre to be colloid than one of simple hyperplasia. Similarly, the more long-standing the goitre, the more likely is it to be nodular. A congenital goitre is almost always hyperplastic, because it has not had the chance to involute. The occurrence of a pyramidal lobe in an individual indicates that the mother had some iodine deficiency, though some authorities dispute this. Nodules are very rarely found in the thyroid of an individual under the age of 10 years, because they have not had time to form. For this reason the existence of "congenital adenomata" is extremely doubtful. Prof. Wegelin, at the Berne Institute, in his great experience has never seen one.

THE ÆTIOLOGY OF SIMPLE GOITRE.

The fundamental cause of simple goitre is unknown. It is considered that simple goitre is a secondary compensatory hypertrophy brought about by a variety of stimuli which lead to functional activity of the thyroid and so deplete its iodine store. Thus the immediate cause is an iodine deficiency, which is amply proved by the fact that iodine will prevent its occurrence, no matter what the goitrogenic agent. (Iodine will not prevent the condition which has been termed by Williamson and Pearse lymphadenoid goitre, because this is a

chronic inflammation, a thyroiditis, which bears no relation to iodine metabolism.) Iodine deficiency may be either (*a*) an absolute deficiency, that is, a deficient amount in the food and water ingested, or (*b*) a relative deficiency, that is, the tissues for some reason require more iodine in the shape of thyroid hormone than the thyroid can normally supply without enlarging. Factors which may produce a relative iodine deficiency are infections, where the thyroid plays a part in bringing about an increased metabolism, puberty, pregnancy, lactation and the menopause. The large number of agents which will produce goitre experimentally in animals, such as cabbage, methyl cyanide, diets rich in fat and diets deficient in vitamins, do so by bringing about a relative iodine deficiency.

The question has occasionally been asked, if an absolute iodine deficiency causes a hyperplastic goitre, why should so many of the inhabitants of Switzerland, where the food and water is deficient in iodine, have colloid goitres, *i. e.* hyperplastic glands which have involuted? The answer is that an absolute iodine deficiency is not the only factor which accounts for endemic goitre in Switzerland. During the periods of growth, puberty and pregnancy the iodine requirements of an individual are greater than at other periods of life. It is well known amongst experimenters that goitre can be produced much more easily in a young growing animal than in an adult. Not all Swiss natives have visible goitres, although most of them are probably taking similar food. Hence the deficiency of iodine in the diet is not severe enough to give rise to any marked thyroid enlargement by itself. During those periods, however, when the organism's iodine requirements are increased, then the amount of ingested iodine is far from adequate, and there results in a large percentage of the population a hyperplastic goitre, which involutes to the colloid stage when the individual's iodine requirements are later diminished. In regions where there is no endemic goitre, the amount of ingested iodine is sufficient in most cases to tide the gland over these periods of increased iodine requirement. Thus, an absolute iodine deficiency does not explain the whole story in these endemic zones; some other endogenous factor, producing a relative iodine deficiency, is essential. This view is also held by Wegelin and the Swiss workers.

The Pathology of Graves' Disease.

In Graves' disease the thyroid gland undergoes the same cycle of changes as in simple goitre. It is thought by some observers that a hyperplastic gland signifies Graves' disease, but, as has been shown above, this appearance also occurs in simple goitre. In the same way it is thought that the occurrence of hyperplastic areas in a colloid gland signifies toxicity, but this appearance, too, occurs in simple goitre. However, as a general rule, it may be said that a hyperplastic gland in a child is more likely to be a simple goitre, whereas a hyperplastic gland in an adult is more likely to be one of Graves' disease. The fallacies, however, of such a generalization are obvious.

A prominent and fairly frequent finding in Graves' disease is a varying degree of lymphoid hyperplasia, which is seen most often in enlargement of the tonsils and pharyngeal lymphoid tissue, enlargement of the thymus and of the Malpighian bodies in the spleen, localized accumulations of lymphocytes in the thyroid and an absolute lymphocytosis. The occurrence of localized accumulations of lymphocytes in the thyroid weighs heavily in favour of a diagnosis of Graves' disease, but this, too, is not specific for the syndrome, as they may also occur in Addison's disease, *status lymphaticus* and occasionally in simple goitre. The removal of infected tonsils is an important measure in the treatment of Graves' disease, but in view of tonsillar enlargement being often merely a manifestation of the lymphoid hyperplasia associated with the condition, and not necessarily due to chronic infection, the wholesale removal of enlarged tonsils is to be deprecated.

The Ætiology of Graves' Disease.

In contrast to simple goitre, almost nothing is known of the ætiology of Graves' disease. The hypotheses which have been advanced to explain the condition are legion. One which has received considerable attention is that originally enunciated by Moebius in 1896 and recently revived by Plummer (7). In order to explain the nervous manifestations and the asthenia, which occur in Graves' disease, but not in pure hyperthyroidism produced by the thyroid hormone, the hypothesis postulates a dysthyroidism in this condition—that is, the production by the thyroid of an abnormal secretion deficient in iodine which is responsible for the various symptoms. The beneficial effect of iodine in treatment is supposed to be due to its converting this "incomplete thyroxine" into the normal product. The theory is purely speculative and without any foundation in fact. "The direct study of derivatives of thyroxine, particularly of those deficient in iodine, has afforded no justification for the assumption on which it is based, and the correctness of this assumption is, in any case, denied by the limited period during which iodine therapy exercises its good effect" (Harrington (8)).

A more rational view, and one favoured by many

observers, is that Graves' disease is not primarily a thyroid disease, but that the thyroid produces an increased amount of thyroid hormone secondarily to some powerful stimulation. Whether this stimulation is through the sympathetic nervous system, or due to an over-production of the thyrotropic hormone of the anterior pituitary, or due to a deficient secretion of the suprarenal cortex, which Marine (9) has suggested may control the thyroid, is unknown. Underlying the condition there is a constitutional defect, which may be congenital or acquired, associated with deranged function of the visceral nervous system.

The beneficial effect of iodine in cases with marked hyperplasia has been attributed by some to the rapid involution which its administration brings about, wherein the vesicles become distended with colloid and cause a pressure retention, which temporarily blocks excretion until the thyroid cells have accommodated themselves to the increased tension (Marine (10), Rienhoff (4)), but this question is not yet settled. The frequent failure of iodine to cause any marked improvement in cases of Graves' disease associated with nodules in the thyroid has been clearly shown by Marine (11) to be due to the fact that these nodules often do not react to iodine in the usual manner, although they are functioning thyroid tissue.

When Graves' disease occurs in individuals who already have a simple diffuse goitre or a simple nodular goitre, it is spoken of as secondary Graves' disease. The ætiology is the same as that of primary Graves' disease. The terms "toxic adenoma" and "adenomatous goitre with hyperthyroidism" used to be applied, and still occasionally are, to those cases in which there are toxic symptoms associated with one or more nodules in the thyroid. As in these conditions the cardiac manifestations outweigh the nervous, they are considered to be separate entities from Graves' disease. There is no justification for this distinction. Nodular goitre, as shown above, is commoner in older individuals. These are more likely to have previous damage to their heart muscle, which is, consequently, unable to stand up to even slightly increased amounts of thyroid hormone. The belief that in the so-called "toxic adenoma" the nodule alone, and not the thyroid gland as a whole, gives rise to the toxic symptoms is untenable, as it is inconceivable that only one portion of a gland should respond to a generalized stimulation. The benefit which the patient derives from enucleation of the nodule is ascribable to removal of functioning thyroid tissue, and it is highly probable that the same benefit would accrue were the nodule left intact and a portion of the surrounding thyroid tissue removed instead. As, however, the removal of the nodule is also by way of being a cosmetic measure, we shall have to await conclusive proof until a *rara avis* is found who is willing to sacrifice her appearance for the cause of medical science.

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A. W. SPENCE.

THE WOODPECKER.

I SHALL never forget that perfect June morning. After breakfast, while strolling round the garden, I found a whitethroat's nest in a gooseberry bush, and in its frail cup of grass stems lay one mottled egg.

While admiring this I was called to the telephone.

A man's voice, the respectful modulated voice of a butler, requested me to call that morning on Mrs.—— at the Big House. This was a piece of good news, for funds were low, and all visitors to the Big House were charged, and paid, a guinea fee.

The whitethroat had brought me good luck.

These summer migrants—human summer migrants—were a useful, if unreliable, source of income to me. They supplied the jam to go with the local bread.

Most of the visitors came from London or other large cities, and rented houses or cottages for the summer months.

They would arrive in perfect health and spirits, but—fortunately for me—this state of things did not always last for long. Sooner or later many of them had to come to me, or I had to go to them.

The moment they arrived in the country they did

extraordinary things which undermined their health. Middle-aged and even elderly fathers of families, accustomed to regular lives, regular hours for meals and office seemed, when on holiday, to loose all sense of prudence. I have known one of these to arise at dawn on his first morning at Bewley, and to go forth barefooted into the dew-drenched meadows in search of mushrooms.

From his bed this individual confided to me that he did not think the air of Bewley suited him; it was too damp and relaxing.

Then the horseflies, mosquitoes and midges were stout allies of us forest doctors. We, the residents, seemed to possess an immunity against their poison, while the visitors, the tasty foreigners, fell easy victims.

Their faces swelled, they ran high temperatures, felt thoroughly miserable, but at last gained blessed relief through my cooling draughts and soothing lotions.

But to return to the butler's telephone message. The Big House belonged to Lord Bewley, and stood high up in a wood, surrounded by oaks, pines and silver birches.

Each year, as soon as the swallows and the rich Americans reached our shores—I am speaking of those piping days of plenty before the war, when there were rich Americans to be spoiled by impoverished English noblemen—his lordship would rent his house in the woods and move with his family into a small house he had built on the sea-shore.

But this summer the Americans were forestalled or outbid by a wealthy whisky magnate, and it was his wife whom I set off to visit on that never-to-be-forgotten June morning.

One puts on one's best suit of clothes for a guinea patient, and wearing mine, I duly arrived at the Big House and was ushered into the best bedroom. One glance at the washing-stand prepared me for what was in store, for there, row upon row, stood medicine bottles, jars, pill-boxes, and all the other paraphernalia so dear to the hypochondriac.

And such the lady sitting up in the bed proved to be. She lost no time telling me her sorry tale. How Dr. So-and-So had said this, while Dr. Someone-else had told her the exact opposite. Of course, she did not have much faith in doctors, and perhaps—who knows—she was justified. A typical *malade imaginaire* with nothing to do, great wealth, her whole interests had become centred on herself and her health. She wondered if I had much experience in such cases as hers, for she had her doubts, owing to my youthful appearance. To reassure her, I protested I was much older than I looked, and endeavoured to hint that I had been successful in several somewhat similar, though not quite identical to hers.

And the dreary recitation of symptoms began, and continued, on and on, while I stood beside her bed longing for her to cease, so that I should be free to go out into the open air and the sunshine, and drive slowly back through the woods.

Then suddenly, through the open window, I heard quite distinctly and quite nearby the drumming mating call of a Greater Spotted Woodpecker. Leaning out through the window I looked towards a great oak tree which stood almost directly opposite. At first I could not see the bird, but all at once the sonorous drumming began again, and there, sure enough, was the gallant little bird, his scarlet-capped head vibrating against a hollow bough. What a glorious sight and sound! I had seen and heard the same before, but only from the ground and a long way off, but here it was happening only a few yards away, at the same level as myself. Again and again did that woodpecker drum. I could have spent an hour as audience to such a concert.

Then all at once the spell was broken. A moment before, the world had contained nothing but that woodpecker and me. Now our intimacy was being spoiled by an intruder—an outsider.

I could not see the intruder from where I stood, half out of the bedroom window, but I knew she was behind and watching me.

I tried to be calm and collect my thoughts. Whatever was I to do? What could I say to her to excuse such an unprofessional lapse?

I even attempted to reconstruct the scene of my progress from her bedside to the open window. I remembered the first note of the bird, and simultaneously, it seemed to me, I was leaning out of the window. All memory of those intervening seconds was lost.

Some instinct told me she was no lover of birds. Useless, then, to throw myself on her kind mercy and plead my weakness, and excuse my offence by confessing to her how the spotted woodpecker was my sweetheart of all our English birds.

She would never understand and never forgive. The position I had got myself into was not an easy one to get out of with dignity or self-respect. All the same, I could not go on for ever hanging out of her bedroom window; she and the situation had to be faced, so turning away from the woodpecker, the oak tree and the sunshine, I confronted my patient and—received my dismissal.

I had no excuse to offer. It was an ignominious retreat, and though I try to forget what she said, her words still smart.

My friend and rival, Dr. Bairn, of Hythe, was called in in my place. He was not likely to commit such a lapse as I had, and in any case, he did not know the call of a

spotted woodpecker from the noise made by a threshing machine, nor the difference between a woodlark and a tree pipit. But he was a sound practitioner and a level-headed doctor, not the sort to interrupt the flow of symptoms from a guinea patient.

I do not want it to be thought for one moment that I have, or ever had any feeling of grievance towards Mrs.—— for her treatment of me. On the contrary, I consider she acted well within her rights, for, after all, a patient is entitled to a decent hearing, from a country doctor, for a guinea.

All the same, my dismissal inflicted a sore wound to my self-esteem, which was not mollified by seeing Dr. Bairn pass my house each morning on his way to listen, not to a woodpecker's mating call, but to my late patient's song of woe; for which he was being paid, each session, just one golden guinea, which might have been mine.

But all this happened long ago, and time does heal mental sores. After all, if I had earned fifty guineas, they would have been spent years gone by, leaving nothing to show now, while instead I have the vivid memory of that woodpecker, drumming, drumming, with the green oak leaves and the blue sky of a June day for a background—a picture which I will never forget, and one which all the gold in New York could never buy.

PHILIP GOSSE.

STUDENTS' UNION.

CRICKET CLUB.

1ST XI.

ST. BARTHOLOMEW'S HOSPITAL *v.* M.C.C.

Played at Winchmore Hill on Thursday, May 25th.

The wicket was perfect, but batting first, we could only muster a total of 68 runs. Of these, Dolly and Morison collected over half between them. There was no excuse for such a lamentably poor batsmanship.

The M.C.C. opening pair, Fordham and Clover-Brown, compiled 102 for the first wicket; the former was in great form—in his previous match against Oxford University he had made two centuries. Their eventual total was one of 273 runs. Dolly was our most successful bowler with 4 for 53.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. JOHN'S COLLEGE.

Played at Cambridge on Saturday, May 27th.

The form shown by our team was a revelation after the previous display against the M.C.C., and showed our true strength in a better aspect.

John's, by careful but somewhat tedious cricket totalled 178 for 5 wickets declared in 2¾ hours. We were left with 2¼ hours in which to make the runs. The response was magnificent: Wheeler (43) and Morrison (78) put on 100 runs for the second wicket partnership in 70 minutes, Wedd (47 not out) replaced Wheeler, and the run-getting continued at 2 per minute until victory came by 7 wickets with 20 minutes to spare.

Assuredly such a display is compatible with the interests of brighter cricket, and our men are to be congratulated.

The game arranged for Saturday, June 3rd, *v.* St. George's Hospital was scratched by them.

ST. BARTHOLOMEW'S HOSPITAL *v.* CROYDON.

Played on Monday, June 5th. Away.

The team was under strength for this game and we were defeated by 9 wickets. Boney (48) and Wedd (32) alone reached double figures in a total of 114.

ST. BARTHOLOMEW'S HOSPITAL *v.* PAST XII.

Played at Winchmore Hill on Saturday, June 10th.

On this, a glorious day, we must congratulate the Past, captained by Dr. Bourne, on their first victory over the Hospital since, I think, 1908.

The day was kind and the wicket appeared magnificent. The Past, batting first, made a promising start, he first wicket falling at 41. After that, each man scored consistently until a total of 177 for 10 wickets was reached. The finish was superb, in that Hunt and Parrish put on 100 runs for the last wicket. The total was the commendable one of 277 runs—on that wicket, however, not an impossible task to pass. Cochrane, whose bowling possessed more than average venom, took 4 wickets for 9 runs, his best performance to date.

Our start was disastrous, for 3 wickets were down for 29 runs. Improvement ensued until we had reached 101 for 5 wickets, but another relapse resulted in the eighth wicket falling at 128. Then Mundy and Anderson provided contrast in individual styles when they realized 60 runs for the ninth wicket; of these the latter, in a happy bout of hitting, made 52, including 3 sixes. We had but 11 men, but Gabb's decision to bat again did not increase the Bart.'s total, and we ultimately made 191 all out.

The Past thus won by 86 runs. The scores are appended.

PAST.		PRESENT.	
Sinclair, b Gabb	30	A. R. Boney, b Maley	24
Gilbert, b Wade	13	F. E. Wheeler, b Hay-Shunker	0
Capper, c and b Morison	35	C. R. Morison, lbw, b Hay-Shunker	32
Oldershaw, c Wheeler, b Wade	19	J. C. Cochrane, b Hay-Shunker	0
Wedd, lbw, b Wade	28	G. V. H. Wade, c Wedd, b Parrish	18
Hay-Shunker, b Wade	2	W. H. Gabb, run out	23
Maley, c Dolly, b Cochrane	13	R. C. Dolly, c Hay-Shunker, b Maley	10
Bourne, c Anderson, b Cochrane	8	J. D. Wilson, b Parrish	9
Parrish, b Cochrane	34	J. D. Anderson, c Spencer, b Wedd	52
Spencer, c Dolly, b Cochrane	0	R. Mundy, c Spencer, b Wedd	7
Theobald, run out	1	W. T. Ross, not out	0
Hunt, not out	49	W. H. Gabb, b Maley	0
Extras	45	Extras	16
Total	277	Total	191
Bowling: Mundy, 0 for 55; Dolly, 0 for 30; Gabb, 1 for 53; Wade, 4 for 43; Morison, 2 for 27; Anderson, 0 for 20; Cochrane 4 for 9.		Bowling: Maley, 3 for 31; Hay-Shunker, 3 for 68; Wedd, 2 for 25; Sinclair, 0 for 13; Parrish, 2 for 37.	

ST. BARTHOLOMEW'S HOSPITAL *v.* HAMPSTEAD.

Played at Winchmore Hill on Saturday, June 17th. Drawn game.

Winning the toss, Hampstead put us in as the pitch appeared sticky after the early morning rain and the hot sun.

Because of a fifth wicket stand of 141 runs by Wade (48) and Wedd (102) we were able to declare at the tea interval with a score of 243 for 7. Wedd's second century of the season included two magnificent sixes, one, a superlative drive, easily clearing the pavilion.

With 2½ hours to get the runs, Hampstead deprived the game of all interest by pottering around for a total of 115 for 6 at the close.

2ND XI.

The games arranged for both Wednesday, May 24th, and Saturday, May 27th, against Imperial College and the Old Paulines respectively were scratched by our opponents.

ST. BARTHOLOMEW'S HOSPITAL *v.* DOWNING COLLEGE.

Played at Cambridge on Saturday, June 3rd.

Downing opened on the most fiery wicket we had encountered during the season, and were definitely on top when 4 wickets had fallen for 33 runs. However, a timely stand for the fifth wicket was largely responsible for a total of 148. Wedd (5 wickets) and Dransfield (4 wickets) shared the bowling honours.

Naturally we anticipated an easy victory, but sensations were rife and 4 wickets were down for 5 runs. M. L. Mundy and Wedd took the score to 61 for 5 wickets; in all we made 77 runs, of which Wedd made more than half. Our batsmen seemed quite incapable of coping with good, fast bowling—a very lamentable confession.

ST. BARTHOLOMEW'S HOSPITAL *v.* HORLICK'S.

Played at Slough on Wednesday, June 7th.

After lunching regally and touring the factory our team might have been excused had play resolved itself into a comatose event; instead, a very exciting game resulted, in which we proved victorious by a matter of 18 runs.

We batted first, but Lund—a Buckinghamshire player—proved a deadly obstacle to our right-handed batsmen, his deliveries having a very late inswing which no one seemed able to combat; he took 6 for 42. We did well to make 135, the credit for these being due to Wedd, Wade and Ross.

When Horlick's batted, Dolly bowled a perfect length and maintained a magnificent consistency for some 14 overs, to take 7 for 52, 6 clean bowled. To dismiss the opposition for 117 after the first wicket fell at 46 was first class.

ST. BARTHOLOMEW'S HOSPITAL *v.* SOUTHGATE.

Played on Saturday, June 10th. Away.

Our total of 179 was noteworthy because both Maidlow and Burnett made their first 50's of the season. However, Southgate made the runs for 9 wickets. Altogether an even game between old foes.

ST. BARTHOLOMEW'S HOSPITAL *v.* OTTERSHAW COLLEGE.

Played at Chertsey on Wednesday, June 14th.

In the most delightfully sylvan surroundings imaginable, the 2nd XI defeated Ottershaw by an innings.

Though the opposition was hardly formidable, the gaiety of the day's cricket eclipsed all else. We made 218 runs on a rain-softened wicket; hectic enough was the ninth-wicket stand of 50 runs compiled by truly agricultural cricket.

The College totalled 52 and 60-odd runs in their two innings. Finally, enlivened by Morison's clothed entry into the swimming-bath, the teams indulged in aquatic sports.

ST. BARTHOLOMEW'S HOSPITAL *v.* ARTISTS' RIFLES.

Played at Putney on Saturday, June 17th. Lost by 4 wickets.

The rain spoilt this fixture. Our declaration of 86 for 6 wickets gave our opponents a good chance, and with a wet ball we did well to dismiss 6 men for 44 runs. They eventually reached 109 for 6.

LAWN TENNIS CLUB.

The results of the first few matches played this term were inadvertently omitted from the June issue of the JOURNAL.

As is often the case, it was found necessary to cancel the first three matches of the season, chiefly due to the ground being unfit. Great disappointment was caused by our match against Queen's Club having to be scratched, as they had been asked to stage the Davis Cup match against Finland on the same day. On May 6th a team went up to Oxford to play Balliol College, but after playing only one match rain set in for the day and no further play was possible. On May 10th we played Worcester College, Oxford, at Oxford; our team was very weak, and we unfortunately lost by the odd match after quite an exciting finish.

Mention should be made of the trial matches which were held at Winchmore on Saturday, April 29th. These all went off quite satisfactorily, and although no outstanding talent was disclosed, there were many who might well be described as definitely good players. This season there is great competition for inclusion in the team, and as there are so many, all of more or less the same standard, it is exceedingly difficult to know who to include.

So far this season in the 1st VI we have won 5 matches and lost 3, while 6 have been scratched. The 2nd VI have won 3, lost 2, and 4 have been scratched, while one, in which we played only two pairs against the Northampton Engineering College, was drawn. The 3rd VI won the only one they have played out of 4.

On Wednesday, June 7th, we played the second round of the Inter-Hospital Cup (having received a bye in the first round) against London Hospital. The 1st VI managed to win quite easily by 9 matches to 3, but the 2nd VI were unfortunately beaten by the odd match after a very good finish. This was rather disappointing, as we were hoping that the 2nd VI would do better this year.

Our annual match against the Past was played on Saturday, June 10th, and was as usual a great success. Sir Charles Gordon-Watson had collected a VI which was really stronger than last year, but we managed to defeat them by 8 matches to 1. The weather was unfortunately rather dull, and as a result not so many visitors as usual came up to Winchmore. However, in spite of this it was really a most enjoyable afternoon.

The following are the results of all the matches played this season:

1ST VI.

Wednesday, May 10th, *v.* Worcester College, Oxford, at Oxford. Lost, 5—4.

R. C. Witt and J. W. B. Waring beat A. D. Adams and P. H. Wooley, 4—6, 6—4, 6—3; beat P. Henderson and D. N. Osborne. 5—7, 6—4, 6—4; beat A. N. Bryan-Brown, Esq., and R. H. B. Keater, 6—1, 6—2.

A. H. Hunt and J. J. Slave lost to Adams and Wooley, 2—6, 6—4, 5—7; lost to Henderson and Osborne, 3—6, 3—6; beat Bryan-Brown and Keater, 6—2, 4—6, 6—2.

L. R. Taylor and H. M. Dermorair lost to Adams and Wooley, 2—6, 3—6; lost to Henderson and Osborne, 4—6, 5—7; lost to Bryan-Brown and Keater, 2—6, 6—8.

Saturday, May, 20th *v.* R.N.C., Greenwich, at Winchmore. Won, 7—1.

J. H. Hunt and O. A. Savage beat Sub-Lieuts. Murdoch and Grace, 6—2, 6—3; beat Sub-Lieuts. Hawel and Lacon, 6—2, 6—3; drew with Lieut. Turner and Sub-Lieut. Dobbs, 9—11, 6—4.

J. R. Kingdon and J. R. Blackburne beat Turner and Dobbs, 6—4, 6—0; beat Hawel and Lacon, 6—3, 6—4; beat Murdoch and Grace, 6—2, 6—4.

F. J. Beilby and R. C. Witt beat Murdoch and Grace, 4—6, 6—0, 10—8; beat Hawel and Lacon, 6—1, 6—0; lost to Turner and Dobbs, 4—6, 4—6.

Sunday, May 28th, *v.* Lansbury Club, at Teddington. Won 6—3.

J. R. Kingdon and J. R. Blackburne lost to C. F. O. Lister and L. E. Cater, 4—6, 3—6; beat D. R. Brown and G. Loe, 6—3, 6—2; beat S. Horton and G. W. Hole, 6—3, 6—4.

R. C. Witt and J. W. B. Waring lost to Lister and Cater, 3—6. 4—6; beat Brown and Loe, 6—2, 7—5; beat Horton and Hole, 3—6, 6—4, 6—3.

B. Thorne-Thorne and W. K. Frewen lost to Lister and Cater 3—6, 4—6; beat Brown and Loe, 6—3, 6—1; beat Horton and Hole, 6—4, 7—5.

Wednesday, May 31st *v.* King's College Hospital, at Denmark Hill. Lost, 9—0.

Saturday, June 3rd, *v.* Roehampton, at Roehampton. Lost, 4—5.

Wednesday, June 7th: Cup-tie, 2nd round, *v.* London Hospital. Won, 9—2.

Singles:

J. R. Kingdon beat J. Metcalf, 6—4, 6—4.
R. C. Witt beat A. K. Monro, 6—3, 6—4.
B. Thorne-Thorne beat A. C. Romsey, 6—0, 7—5.
J. G. Nel beat W. H. Poole, 6—2, 6—3.
J. C. Cochraine beat R. H. Dobbs, 6—3, 0—6, 6—2.
L. Heasman lost to J. R. Bodington, 3—6, 1—6.

Doubles:

J. R. Kingdon and J. G. Nel beat A. C. Romsey and J. Metcalf, 6—1, 7—5; beat W. H. Poole and A. K. Monro, 6—4, 6—1.

R. C. Witt and B. Thorne-Thorne beat Poole and Monro, 6—3, 6—1; beat Dobbs and Bodington, 6—2, 6—1.

J. C. Cochraine and L. Heasman lost to Romsey and Metcalf, 6—2, 2—6, 3—6; lost to Dobbs and Bodington, 3—6, 2—6.

Saturday, June 10th, *v.* The Past, at Winchmore. Won, 8—1.

K. A. Latter and O. A. Savage beat Knight and P. Hancock, 6—4, 6—4; beat W. S. Macklay and C. H. Hinds-Howell, 6—4, 4—6, 9—7; beat Sir Charles Gordon-Watson and B. H. Gibson, 6—1, 6—3.

J. R. Kingdon and J. R. Blackburne beat Knight and Hancock, 6—1, 6—1; beat Macklay and Hinds Howell, 6—3, 6—4; beat Sir Charles Gordon-Watson and Gibson, 6—1, 6—3.

R. C. Witt and L. Heasman beat Knight and Hancock, 6—2, 6—3; lost to Macklay and Hinds-Howell, 6—3, 3—6, 7—5; beat Sir Charles Gordon-Watson and Gibson, 6—3, 9—7.

Sunday, June 11th, *v.* The Bank of England, at Roehampton. Won, 5—4.

J. R. Kingdon and J. R. Blackburne lost to R. H. Berry and J. D. Warne, 3—6, 6—2, 3—6; beat D. J. Macara and C. J. Benavia, 6—4, 4—6, 9—7; beat R. H. Dean and S. A. Bilsham, 6—2, 6—1.

R. C. Witt and B. Thorne-Thorne lost to Berry and Warne, 10—8, 0—6, 1—6; beat Macara and Benavia, 6—3, 1—6, 7—5; lost to Dean and Bilsham, 1—6, 2—6.

W. K. Frewen and A. H. Hunt lost to Berry and Warne, 1—6, 3—6; beat Macara and Benavia, 6—4, 4—6, 7—5; beat Dean and Bilsham, 6—4, 6—2.

2ND VI.

Saturday, May 20th, *v.* R.N.C., Greenwich, at Greenwich. Won, 7—2.

B. Thorne-Thorne and P. J. Hardie beat 1st pair, 6—2, 6—3; beat 2nd pair, 6—3, 6—2; beat 3rd pair, 6—3, 6—4.

J. W. B. Waring and W. K. Frewen beat 1st pair, 6—3, 6—1; beat 2nd pair, 6—2, 6—3; beat 3rd pair, 6—4, 6—2.

J. R. Royston and R. H. Dale lost to 1st pair, 2—6, 3—6; lost to 2nd pair, 3—6, 5—7; beat 3rd pair, 8—6, 7—9, 6—3.

Wednesday, May 24th, *v.* U.C.H. at Winchmore. Won, 9—0.

R. H. Dale and J. Smart beat 1st pair, 6—3, 6—1; beat 2nd pair, 6—3, 6—4; beat 3rd pair, 6—0, 6—1.

A. Innes and J. Blackburn beat 1st pair, 6—2, 1—6, 6—1; beat 2nd pair, 6—3, 7—5; beat 3rd pair, 6—0, 6—1.

N. H. Bloom and J. J. Slave beat 1st pair, 6—3, 6—2; beat 2nd pair, 6—1, 6—2; beat 3rd pair, 6—1, 6—0.

Wednesday, June 7th: Cup-tie, 2nd round, *v.* London Hospital, at Winchmore. Lost 8—7.

Singles:

W. K. Frewen beat Grant, 6—0, 6—0.

J. W. B. Waring beat Walker, 8—6, 7—5.

P. J. Hardie beat Jones, 4—6, 6—4, 6—2.

R. H. Dole lost to Northcroft, 1—6, 3—6.

A. Innes beat Shaw, 2—6, 6—4, 6—3.

G. Blackburn lost to Robins-Browne, 1—6, 13—11, 0—6.

Doubles:

Frewen and Hardie beat Grant and Walker, 4—6, 6—3, 6—4; lost to Jones and Northcroft, 6—2, 2—6, 8—10; lost to Shore and Robins-Browne, 4—6, 5—7.

Waring and Dale lost to Grant and Walker, 6—1, 5—7, 2—6; lost to Jones and Northcroft, 6—2, 7—9, 4—6; beat Shore and Robins-Browne, 6—4, 7—5.

Innes and Blackburn lost to Grant and Walker, 4—6, 4—6; lost to Jones and Northcroft, 7—5, 2—6, 1—6; beat Shore and Robins-Browne, 7—5, 6—2.

Saturday, June 10th, *v.* King's College Hospital, at Denmark Hill. Won, 6—3.

R. H. Dale and W. P. Shemilt lost to 1st pair, 8—6, 5—7, 4—6; lost to 2nd pair, 6—3, 7—9, 0—6; beat 3rd pair, 6—3, 5—7, 6—3.

A. R. Pope and G. Blackburn beat 1st pair, 6—3, 4—6, 6—3; beat 2nd pair, 6—2, 6—3; beat 3rd pair, 6—4, 6—2, 6—2.

L. M. Curtiss and R. L. Benian lost to 1st pair, 4—6, 1—6; beat 2nd pair, 11—9, 6—0; beat 3rd pair, 7—5, 6—4.

Saturday, June 3rd, *v.* Melbury Club, at Kensington. Lost, 2—7.

J. G. Nel and J. G. Berry lost to F. Furnival and J. K. Hamilton, 1—6, 0—6; lost to W. S. Maclay and N. C. W. Green, 2—6, 5—7; lost to E. C. Moxon and C. A. Hinds-Howell, 3—6, 4—6.

R. L. Benian and A. Innes lost to Furnival and Hamilton, 3—6, 1—6; lost to Maclay and Green, 2—6, 4—6; beat Moxon and Hinds-Howell, 6—4, 4—6, 6—2.

J. Bell and C. Fletcher lost to Furnival and Hamilton, 2—6, 0—6; lost to Maclay and Green, 2—6, 5—7; beat Moxon and Hinds-Howell, 6—3, 8—6.

3RD VI.

Saturday, May 6th, *v.* Tankards Club, at Winchmore. Won, 5—4.

R. C. W.

ATHLETIC CLUB.

INTER-HOSPITAL ATHLETIC SPORTS, 1933.

It was as long ago as 1926 that Bart.'s succeeded in winning the Championship Shield at the Inter-Hospital Sports at Stamford Bridge.

For the next seven years Bart.'s had narrowly failed to establish themselves as Athletic Champions, although each time they have been runners-up. In 1931 they missed the Shield by a bare margin of 2 points from St. Thomas's. At last, this year, we have come into our own, for on the perfect afternoon of June 8th, at Motspur Park, our representative team of 18 athletes secured the trophy from St. Thomas's by a clear margin of 14½ points. It is noteworthy that our score of 62 points is larger than that of any winning Hospital team for many years, indicating our all-round strength.

Without becoming lyrical about our success, it is perhaps not immodest to observe that we scored at least one point (*i.e.* we were placed) in every event, except the Tug-o'-War. In this gymkhana event we were quite outclassed by St. Thomas's, who were well-trained experts.

Perhaps it is thought that one should only chant the praises of Reilly, Nel, and Dransfield, the champions who gained us four first places, yet when one considers that we also secured 8 second places and 6 third places, one feels that no praise can be too high for a team in which every man reaped the reward of steady training. It is true that the individual brilliance of C. P. C. Reilly and J. G. Nel contributed materially to our victory, yet it is obvious that no two athletes, however brilliant, could have won the Shield for us alone. It would be superfluous to broadcast the ability of Reilly, for his name is already coupled with those of the finest quarter-milers in the country. It is sufficient to say that he was awarded the "Princess Marie Louise" Cup for the best individual performance in the United Hospital Sports, as well as the "British Medical Association" Cup for the finest all-round athlete. The vastly improved sprinting of Nel has also been of the greatest value to us. He not only reached the final of the 100 yards in the U.A.U. Championships, but quite recently defeated E. L. Page, the Olympic sprinter and ex-A.A.A. champion. Another athlete who has improved his performance tremendously this season is E. E. Harris. By constant practice he has been able to add another 15 ft. to his javelin throw; in fact it was not until the final throw that C. M. Dransfield was just able to beat him by less than 2 ft. for the United Hospitals title. We have been very fortunate in obtaining an extremely promising long-jumper in G. A. Akeroyd, a freshman from Wrekin. At Winchmore Hill he has just failed to reach the 20-ft. mark, and at Motspur Park he cleared a sound 18 ft. 7 in. to secure us a second place in this event.

And now, having lustily "blown our own trumpets", what about our opponents? Our very worthy friends and equally redoubtable rivals, St. Thomas's, won 6 events to our 4; they were, however, unplaced in four events. L. T. Bond, as expected, broke his own record in the Pole Vault and was a serious rival to Reilly for the best performance. A. T. Marrable won the Long Jump with 20 ft. 3 in., and L. R. J. Rinkel just beat Nel in the "Hundred" in $10\frac{3}{10}$ sec. In the Tug-o'-War the well-trained "Tommy's" eight were indeed worthy of better opposition, for each time first Bart.'s and then London were pulled along like toy trains.

B. S. Page, of London, the U.A.U. mile champion, won the 3 Miles and the Mile without any difficulty whatever. In the latter event he equalled the 40-year-old record of 4 min. $31\frac{2}{5}$ sec. T. B. L. Bryan, the Cambridge Blue, won the Half-mile in 2 min. 2 sec., but with more serious opposition he might have bettered 2 minutes. C. W. J. Claydon, of K.C.H., did not turn out in this event, as he was competing for the A.A.A. against Cambridge on the following day. It was in the Medley Relay, however, that Claydon's half-miling resulted in our downfall. Our sprinters, in spite of their ability, could never make up for us what Claydon had gained for King's; and in spite of a brilliant "quarter" by Nel in $51\frac{1}{5}$ sec. we were a good 15 yards behind King's at the finish. Thus Bart.'s lost the Relay Cup which we have held ever since Oxford last won the Boat Race.

This account could not be concluded without some mention of the laudable way in which our Captain, W. H. Jopling, has led and encouraged the team. No praise could be too high for his untiring energy shown in training and organization. It is all the more encouraging to find that his fine example as a captain has been followed by all, and as a result the Club has experienced one of the most successful seasons yet recorded.

J. W. P.

RESULTS.

100 Yards: 1, L. R. J. Rinkel (St. Thomas's); 2, J. G. Nel (St. Bartholomew's); 3, J. G. Youngman (St. Bartholomew's); 4, J. E. Read (King's). Time, $10\frac{3}{10}$ sec.

220 Yards: 1, J. G. Nel (St. Bartholomew's); 2, C. P. Reilly (St. Bartholomew's); 3, J. E. Read (King's); 4, W. A. Groom (Guy's). Time, $23\frac{3}{5}$ sec.

440 Yards: 1, C. P. Reilly (St. Bartholomew's); 2, A. T. Marrable (St. Thomas's); 3, W. H. Jopling (St. Bartholomew's); 4, C. W. J. Claydon (King's). Time, 51⅘ sec.

880 Yards: 1, T. B. L. Bryan (St. Mary's); 2, J. W. Perrott (St. Bartholomew's); 3, D. Fernando (Guy's); 4, T. P. Storey (St. Bartholomew's). Time, 2 min. 2 sec.

1 Mile: 1, B. S. Page (London); 2, T. B. L. Bryan (St. Mary's); 3, J. R. Strong (St. Bartholomew's). Time, 4 min. 31⅘ sec.

3 Miles: 1, B. S. Page (London); 2, T. S. Etheridge (Guy's); 3. K. O. Black (St. Bartholomew's). Time, 15 min. 21 sec.

120 Yards Hurdles: 1, R. S. Richmond (St. Mary's); 2, T. R. Griffin (Guy's); 3, B. Gibson (St. Thomas's); 4, H. W. Rodgers (St. Bartholomew's). Time, 17⅕ sec.

440 Yards Hurdles: 1, C. P. Reilly (St. Bartholomew's); 2, R. T. Norman (St. Thomas's); 3, A. T. Marrable (St. Thomas's); 4, W. H. Jopling (St. Bartholomew's). Time, 57⅗ sec. (U.H.A.C. record).

High Jump: 1, Le Fleming (St. Thomas's); 2, J. Smart (St. Bartholomew's); 3, W. G. Organe (Westminster) and B. Gibson (St. Thomas's). Height, 5 ft. 10 in.

Long Jump: 1, A. T. Marrable (St. Thomas's); 2, G. A. Akeroyd (St. Bartholomew's); 3, W. G. Organe (Westminster); 4, J. G. Youngman (St. Bartholomew's). Distance, 20 ft. 3 in.

Pole Vault: 1, L. T. Bond (St. Thomas's); 2, K. W. Martin (St. Bartholomew's); 3, J. Shields (St. Bartholomew's); 4, C. P. Pearson (St. Thomas's). Height, 11 ft. 9 in. (U.H.A.C. record).

Weight: 1, A. J. Martin (St. Thomas's); 2, G. E. Elliot (St. George's); 3, G. D. Wadd (St. Bartholomew's); 4, L. R. J. Rinkel (St. Thomas's). Distance, 39 ft. 10 in.

Javelin: 1, C. M. Dransfield (St. Bartholomew's); 2, E. E. Harris (St. Bartholomew's); 3, L. T. Bond (St. Thomas's). Distance, 136 ft. 4 in.

Mile Medley Relay: 1, King's; 2, St. Bartholomew's; 3, St. Thomas's; 4, Guy's. Time, 3 min. 41 sec.

Tug-o'-War: St. Thomas's beat London in the final by 2 pulls to *nil*.

Total points:

1. St. Bartholomew's	62
2. St. Thomas's	47½
3. London and King's	14
5. St. Mary's	13

CORRESPONDENCE.

HOSPITAL ARMS.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—When wandering through Winchester Cathedral last week I came across the lid of an old reliquary chest that reposes in the north choir aisle. The official description told me that the chest was given to the Cathedral Priory by Sir William de Lillebone (1258–1334), and that his arms, "per pale sable and silver, a chevron counter changed, are many times repeated on the lid". Ten times, to be exact. His arms are identical with those of Bart.'s, and it would be interesting to know if the heraldic experts could trace any connection between this ancient family and the Hospital.

It is curious that two families connected with Winchester at some time or other—the Lawsons (see Mr. Horner's letter in the May number of the JOURNAL) and the Lillebone family—should carry exactly the same coat of arms.

Yours truly,
HERBERT J. SEDDON.

Royal National Orthopædic Hospital,
Brockley Hill,
Stanmore, Middlesex;
May 25th, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—Like your corresponent I, too, hope devoutly Bart.'s will not adopt the suggested alteration of the shield and its probable colour scheme of gold, black and white. It would add to the atrocities worn by bright young people at seaside resorts; colours which the unkind would hint are those of the "Old Borstallians"! Let us stick to the simple old restrained shield and our well-known colours.

What *is* the shield of the Wakeryng family, so unlike the present shield? (p. 124, April No.). Dr. Norman Moore wasn't often wrong. I expect he found good reason to suggest our shield was that of Wakeryng. John Wakeryng was a big man, whose forty years of office might well leave his arms for those of Bart.'s. Opposite p. 238, vol. i of Moore's work there is the present shield, 1198–1308. This is prior to the cartulary dated 1423 mentioned in your last number by Rouge Croix, and much clearer. Another point—whence and when came the legend below the shield, "Nosocomio (not nosocomeo, as on the Hospital notepaper) Regalis Santi Bartholomei"?

I wonder if the shield noticed by Mr. Horner at St. Cross Hospital had the tinctures argent and sable with the "ordinary" chevron counterchanged. It is a very rare blazon (or achievement). I can find no similar design in any book of coats of arms.

I venture to suggest the money which someone seems prepared to spend on the alterations should be devoted to the Merchant Taylors' site scheme.

The subject is worth getting straight, but we may as well not earn someone's jibe, "The silly man doesn't know his own silly subject", speaking of a certain herald at a law court. Still, heraldry is a pleasant hobby for an antique.

W. H. MAIDLOW.

Ilminster;
May 16th, 1933.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—I had hoped to see in the May issue of the JOURNAL a stiffer and, if I may so express it, less tentative opposition from the heraldic standpoint, to the suggested alteration to the Hospital Arms than has actually been the case. Apparently the association of the name of Rouge Croix with the scheme has acted as a deterrent.

May I, therefore, be the fool who rushes in where angels fear to tread and endeavour to state the case against the design? This, as shown in the coloured plate, can only be regarded as an abominable compromise and an incomplete one at that, for the designers, having taken upon themselves to supply supporters, have not had the courage to carry the matter through to its logical conclusion and concoct a crest also.

In the April number of the JOURNAL, Rouge Croix informs us that the present Arms of the Hospital were in use in the year 1423. He also demonstrates that the Priory and Hospital used entirely different arms in the sixteenth century. These are definite facts which cannot be disputed and, happily, they completely knock the bottom out of the argument advanced in the "Editorial" of the same number, that because the Priory Arms appear on Rahere's tomb and the present Hospital Arms do not, it may be assumed that both institutions had the same arms originally. Perhaps they did, but not those particular arms, as Rouge Croix has also shown, and moreover, it happens to be a fact that the founder's monument in St. Bartholomew's the Great is not coeval with his death in 1145 but is some three hundred odd years later, being of late fifteenth or early sixteenth century date; that is to say, it was constructed *after* the year 1423, thus the absence of the Hospital Arms is easily accounted for, and the heraldry of the tomb is valueless as evidence either way.

Another passage in the same "Editorial" refers to the coloured plate in these words, "the scarlet and gold of the first and fourth quarters contrast admirably with the silver and black of the second and third". Surely, Sir, it can hardly be expected that such a statement (albeit strictly true) is likely to convert the opponents of the suggested design. It may be all very well for those who regard heraldry merely as an attractive means of decoration, but it carries little weight with those of us who take the science and art of heraldry seriously. But, since the decorative aspect has been introduced, let me add that the inclusion of the counterchanged cross (presumably an allusion to the City) is to my mind a particularly unhappy feature, and is the direct cause of the unnecessary confusion complained of by one of your correspondents in the May issue of the JOURNAL.

It must be admitted that corporate bodies (including our modern industrial centres, as shown on cigarette cards) and many institutions quite properly make use of the quartered coat with supporters

and crest, but the purist in heraldic matters will remember, not only that the practice of marshalling arms by quartering originated for the perpetuation by the son of an heraldic heiress of the arms of his mother's family, but also that supporters were adopted in the first place as accessories to the achievements of Royalty, Peers, and certain orders of Knighthood only.

The case for the proposed change has certainly not been proved, and unless some really cogent reasons can be advanced by its protagonists, we must oppose resolutely any tampering with our Arms. One would have thought that the mere fact that the use of the Hospital Arms can be traced back five hundred years would have been a sufficient safeguard against any attempt to alter them. however "unsatisfactory and obscure" their origin may have been.

To instance a parallel case, imagine the indignation of those readers of our JOURNAL who may be in a position to prove to the satisfaction of Herald's College that their own family coat has been in continual use for five centuries (they must be numerically few) if suddenly faced by a similar proposition on the grounds of historical expediency.

Yours faithfully,
G. DRU DRURY, F.S.A.

Corfe Castle,
Dorset;
May 20th, 1933.

REVIEWS.

A SYNOPSIS OF SURGERY. By ERNEST W. HEY GROVES, M.S., M.D., B.Sc.(Lond.), F.R.C.S.(Eng.), Emeritus Professor of Surgery, Bristol University. Tenth edition. (Bristol: John Wright & Sons, Ltd., 1933.) Pp. viii + 693. Figs. 164. Plates xiii. Price 17*s*. 6*d*. net.

This member of the "Synopsis" series is famous enough to require little notice. A certain librarian, not, of course, of this Hospital, states that it is the most stolen book in his library!

It is very far from being "a mere crambook", publicly so much despised, so indispensable in private. Designed to epitomize the main facts of the larger surgical text-books, it is invaluable alike to the student in the wards and out-patient departments, already possessing a larger text-book, and to the overworked practitioner too busy to sort out new knowledge from the innumerable articles appearing in journal and magazine.

The treatment of each subject is uniformly methodical. The type is so varied that quick reference and clear memorizing become an easy task. Pressure of space drives the author to place lists in a continuous, rather than the more extravagant column form. Possibly the subdivision of these paragraphs into two or three columns would add greatly to the clarity of the work.

Beyond a complete general revision of the text, with the addition of the results of recent research in diagnosis and treatment, the edition is in form very like the previous one. A chapter has been added on amputations. There is an excellent chapter of twenty-six pages, illustrated with thirteen coloured plates, devoted to surface-markings.

A perfect, comprehensive index completes a book of reference that no student should be without, whatever his prejudices may be about the synoptic type of literature. Coming as it does from the pen of one who learnt his first principles at this Hospital and who has such a wide experience of teaching and examinations, the book would be a calm, comforting friend to have during those bemusing weeks preceding finals, as well as throughout the clinical course.

CLINICAL DISORDERS OF THE HEART BEAT. By Sir THOMAS LEWIS. Seventh edition. (London: Shaw & Sons, 1933.) Pp. xii + 127. Figs. 55. Price 6*s*. 6*d*. net.

Not even the barrier of price can keep this invaluable handbook from the student. It has become famous for its clarity and soundness. Emphasis is laid on the clinical examination, relying on the trained senses of the observer, with no other mechanical methods of investigation than the simple Dudgeon sphygmograph. Sir Thomas takes the seven fundamental forms of cardiac disorder *sinus arrhythmia, heart-block, premature contractions or extrasystoles, simple paroxysmal tachycardia, auricular flutter, auricular fibrillation, and alternation of the heart*, and defines each, with methods of diagnosis and means of treatment.

The text is almost clear enough to remind us of the elementary infants' readers. The work is illustrated by a number of diagrams and sphygmographic tracings. It is a pity that the first figure, one illustrating the anatomy of the heart, should be rather confused, when very little shading would greatly clarify it. There is very little change from the previous edition.

Few students can afford to disregard a book with such reputation written by a physician so expert in cardiology.

NEUROLOGICAL EFFECTS OF SYPHILIS: DIAGNOSIS AND TREATMENT. By B. BUCKLEY SHARP, M.D., M.R.C.P. (Oxford University Press, 1933.) Pp. 92. Figs. 3. Price 7*s*. 6*d*. net.

The work is divided into two main sections—the general aspects and pathology of syphilis, tabes, general paralysis and their pathological anatomy, and secondly, prevention and treatment.

In the section dealing with changes in the cerebro-spinal fluid, note is made of the bad prognosis in cases of congenitally syphilitic children coming late for treatment, and showing persistently positive Wassermann reactions despite active treatment. Stress is made of the diagnostic value of the colloidal gold curve. Another important point is the susceptibility of the nervous system. One authority states that perivascular infiltration of the meninges with lymphocytes may be found four to six weeks after the primary chancre; even after adequate anti-syphilitic measures when the blood Wassermann is negative, it may be strongly positive in the cerebro-spinal fluid. The author is convinced that inefficient early treatment of somatic syphilis is worse than no treatment at all as regards recurrences in the nervous system. There is no infallible test for the cure. In diagnosis the Kahn test is more sensitive than the Wassermann reaction, and is particularly valuable in treated cases; both should be done. It is interesting to read that amongst fourteen conditions which may give a positive Wassermann reaction, general anæsthesia is one. How long it persists is not stated, but this knowledge should make the anæsthetist approach his victim with some care and misgiving.

The diagram (p. 64) illustrating the technique of cisternal puncture is a happy adjunct to the text.

Malaria is an uncertain therapeutic weapon, and no hard and fast rules can be laid down as to its indications.

The bibliography is extensive and the book is most readable. The author has presented his subject in an acceptable form.

VITAMINS AND OTHER DIETARY ESSENTIALS. By W. R. AYKROYD, M.D. (London: Wm. Heinemann, 1933.) Pp. 218. Price 7*s*. 6*d*. net.

The study of food is fundamental to man's well-being. Now that, for the first time in history, the causes of malnutrition are being discovered, the little learning that is so dangerous is thrust on the gullible from every direction by the more acute but scarcely less ignorant producers. There is a real need for clear and wise instruction in the principles of dietetics. Of the host of books that are written on the subject, there are very few indeed that can be recommended to teach the general public in a way that will prove of general benefit.

Dr. Aykroyd has written a book that, besides being very interesting and readable, is quite as comprehensive as its size will permit.

"On the whole", he writes, "the principles of dietetics are easy to understand. As far as we know at present, dietary perfection can be attained by following simple rules such as those set out here. The serious student of modern dietetics does not offer to supply the elixir of life; he cannot manufacture vitamin concentrates which will prevent us from ever feeling tired; he can suggest no marvellously planned "natural" diets which enable us to live to be a hundred. He holds out little hope that science will discover new foods more sustaining and wholesome than those at present known to man. Avoiding all extravagant claims, he lays down rules by which we can make the best use of the ordinary common foods at our disposal, and promises that, if we take his advice, we shall increase our chances of living a healthy, energetic and happy life, and perhaps ward off a little longer the approach of age."

The book has a message, that the world, which in its natural economy is perfect, is occupied by a race whose diet is defective for the great majority.

The preliminary chapters deal with vitamins and the food constituents, with an explanation of their composition, function, and man's daily requirements of each. Historical details, especially of the more pictureque kind, are freely given. An account follows of the separate constituents and the deficiency diseases, the book closing with suggestions for perfect diets and the effects of such diets on the races of mankind.

Though primarily intended for the scientifically minded lay public, the book should find its way on to the bookshelves of many medical men as being a clear and interesting exposition of the principles of dietetics.

ARAFA'S MODERN ASPECTS OF GASTRO-ENTEROLOGY. (London: Baillière, Tindall & Cox, 1933.) Pp. xviii + 374. Figs. 23. Price 27*s.* 6*d.* net.

One of the most prominent features about this book is a point which is still the subject of disagreement amongst clinicians, namely, the value of X-rays in gastric disease. The author states in his preface (p. vii), "radiology has made such important advances that in the absence of radiological evidence the diagnosis of peptic ulcer and carcinoma is unjustifiable". This is a sweeping statement. Later, however, on p. 46 he states that "radiology ranks supreme in diagnosing gastric ulcer. Recent improvements in the technique will now show direct evidence of an ulcer, namely, the crater, however early and however small in the large majority of cases", which surely modifies his earlier remark.

Great stress is rightly laid on the importance of taking a good history in cases of gastro-intestinal disease; few workers will doubt this, but at the same time in no branch of medicine is it more difficult to assess the value and accuracy of the patient's history.

The value of auscultation of the stomach is considered to be small, although it is well known that the outline of this viscus may be mapped out with considerable accuracy in cases of pyloric obstruction with gastric distention by a combination of auscultation and percussion.

The general arrangement is good, and the classifications at the beginnings of the chapters and sections are clear and helpful; the diets at the end are a feature for which many students will be grateful.

The book is lavishly illustrated with excellent reproductions of X-ray photographs and coloured plates, and reflects great credit upon the publishers.

SPECIFIC CHANGES IN THE BLOOD SERUM. By S. G. T. BENDIEN.

The author has made a contribution to the cancer problem, especially as regards the diagnosis. It was found that a specific reaction was obtained by mixing various sera with mixtures of acetic acid and sodium vanadate. With conditions such as carcinoma, tuberculosis and pregnancy, peculiarities of flocculation are found with the acetic acid-vanadate mixture and sera of these patients. The author claims that disposition to tuberculosis and carcinoma are associated with certain flocculations. Experiments are being carried out on patients with cancer, and the results will be awaited with interest. The book has been well translated by A. Piney, who has had a difficult task.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ABRAHAMS, ADOLPHE, O.B.E., M.D., F.R.C.P. "A Case of Agranulocytosis." *Lancet*, May 20th, 1933.

BIRDSALL, S. E., B.Ch., M.R.C.S. "Sodium Soneryl as a Basal Hypnotic." *British Medical Journal*, May 20th, 1933.

BURROWS, HAROLD, C.B.E., M.B., F.R.C.S. "An Experimental Inquiry into the Association between Gall-stones and Primary Cancer of the Gall-bladder." *British Journal of Surgery*, April, 1933.

CAPPS, F. C. W., F.R.C.S., and DUNHILL, T. P., C.M.G., M.D. "Squamous-celled Carcinoma Occurring in a Pharyngeal Pouch." *British Journal of Surgery*, April, 1933.

COCKAYNE, E. A., D.M., F.R.C.P. *Inherited Abnormalities of the Skin and its Appendages.* (London: Oxford University Press, 1933.)

DAVIES, J. H. TWISTON, M.B. "A Wood's Glass Diagnosis Lamp for Twenty-five Shillings." *British Journal of Dermatology and Syphilis*, May, 1933.

DUNHILL, T. P., C.M.G., M.D., Ch.B. *See* Capps and Dunhill.

FORBES, J. GRAHAM, M.D., F.R.C.P., D.P.H. "Diphtheria Immunization in Infancy." *Practitioner*, May, 1933.

HARRIS, A. G. JEAFFRESON, M.A., M.B., B.Ch.(Camb.). "The Complications of Artificial Pneumothorax: Their Prevention and Treatment." *Tubercle*, March, 1933.

HOGG, J. CECIL, F.R.C.S. *See* Maxwell and Hogg.

HORDER, Lord, K.C.V.O., M.D., F.R.C.P. "Annual Oration on New Treatments for Old," delivered before the Medical Society of London, May 8th, 1933. *British Medical Journal*, May 20th, 1933.

HUDSON, BERNARD, M.D., M.R.C.P. (and HAEBERLIN, F.). "Extrapleural Plombage." *Lancet*, May 27th, 1933.

KINDERSLEY, C. E., F.R.C.S. "New Form of Abdominal Sucker." *Lancet*, May 20th, 1933.

LLOYD, W. ERNEST, M.D., M.R.C.P. (and MACPHERSON, MARGARET, M.D., M.R.C.P.). "A Reinvestigation of Children previously Examined by Tuberculin Tests." *British Medical Journal*, May 13th, 1933.

MCCURRICH, H. J., M.S., F.R.C.S. "Common Infections of the Gall-bladder." *Medical Forum*, vol. i, No. 3 (1933).

MAXWELL, JAMES, M.D., M.R.C.P. "Spontaneous Hypoglycæmia." *Clinical Journal*, June, 1933.

——— and HOGG, J. CECIL, F.R.C.S. "The Incidence of Laryngeal Cancer." *Lancet* May 20th, 1933.

MORLOCK, H. V., *M.C.*, M.D., M.R.C.P. (and PINCHIN, A. J. SCOTT, M.D., F.R.C.P.). "Epituberculosis." *Lancet*, May 27th, 1933.

——— "Primary Intrathoracic New Growth." *British Medical Journal*, May 27th, 1933.

MYERS, BERNARD. "A Case of Low Blood-Pressure Treated with Pituitary Whole Gland by the Mouth." *Proceedings of the Royal Society of Medicine*, May, 1933.

RAVEN, R. W., F.R.C.S. "Diverticula of the Pharynx and Œsophagus." *Lancet*, May 13th, 1933.

ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P. "The Evolution of Endocrine Treatment." *Practitioner*, May, 1933.

SHAW, WILFRED, M.D., B.Ch., F.R.C.S., F.C.O.G. "Treatment of Menstrual Irregularities." *British Medical Journal*, May 27th, 1933.

SHORE, L. R., M.A., M.B., M.R.C.P., D.P.H. "A Report on the Spinous Processes of the Cervical Vertebræ in a Series of Egyptian Skeletons." *Journal of Anatomy*, April, 1933.

SMITH, A. J. DURDEN, M.B., B.S., M.R.C.S. *See* Ward and Smith.

SPARKS, J. V., D.M.R.E.(Cambs.). "Report of a Case of Pharyngeal Diverticulum containing a Neoplasm in its Walls." *British Journal of Radiology*, April, 1933.

SYKES, W. STANLEY, M.A., M.B., B.Ch., D.P.H. "Anæsthetic Mortality." *British Journal of Anæsthesia*, April, 1933.

WALKER, KENNETH, O.B.E., M.B., F.R.C.S. "Endocrinology of the Male Glands." *Practitioner*, May, 1933.

WARD, R. OGIER, *D.S.O.*, M.Ch., F.R.C.S. "The Recognition of Renal Pain." *Clinical Journal*, June, 1933.

WARD, W. ROY, M.B., B.S., M.R.C.S., and SMITH, A. J. DURDEN, M.B., B.S., M.R.C.S. *Recent Advances in Radium.* London: J. & A. Churchill, 1933.

——— and SMITH, A. J. DURDEN, M.B., B.S. *Recent Advances in Radium.* (London: J. & A. Churchill, 1933.)

WILLIAMSON, J. C. F. LLOYD, F.R.C.S. "Internal Hernia through Congenital Aperture in Mesentery: Strangulation." *British Journal of Surgery*, April, 1933.

WILSON, HENRY, M.D., M.R.C.P. "The Treatment of the Voluntary Boarder." *Journal of Mental Science*, January, 1933.

WORTHINGTON, G. V., M.B., B.Ch. "A Practical Survey of Spa Facilities." *Medical Press and Circular*, May 10th, 1933.

TIMES FOR ATTENDANCES IN THE OUT-PATIENTS' AND SPECIAL DEPARTMENTS.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Medical Out-Patients New cases: 9 a.m. Old cases: male, 10 a.m.; female, 10.30 a.m.	Dr. G. Bourne at 9 a.m.	Prof. Fraser and Dr. Hilton at 9 a.m.	Dr. Geoffrey Evans at 9 a.m.	Dr. F. G. Chandler at 9 a.m.	Prof. Fraser and Dr. Spence at 9 a.m.	Dr. E. R. Cullinan at 9 a.m.
Surgical Out-Patients New cases: 9 a.m. Old cases: 10 a.m.	Prof. Gask and Mr. Paterson Ross at 9 a.m.	Mr. R. M. Vick at 9 a.m. (Mr. J. P. Hosford acting)	Mr. J. B. Hume at 9 a.m.	Prof. Gask and Mr. Paterson Ross at 9 a.m.	Mr. Rupert Corbett at 9 a.m.	Mr. Keynes at 9 a.m.
Diseases of Women	Dr. Shaw (new cases at 9 a.m. only).	Cases referred from House Physicians and House Surgeons at 10 a.m.	Dr. Donaldson at 1 p.m.	Cases referred from House Physicians and House Surgeons at 10 a.m.	—	Dr. Shaw at 9 a.m.
Ante-Natal Clinic	Dr. Shaw at 9 a.m.	—	—	Dr. Donaldson and Dr. Shaw at 12.30 p.m.	—	—
Orthopædic Department	Mr. S. L. Higgs at 1 p.m.	—	—	Mr. R. C. Elmslie at 1 p.m.	—	—
Throat and Nose Department	Mr. Bedford Russell at 1 p.m.	Mr. F. C. W. Capps at 9 a.m.	—	Mr. Bedford Russell at 9 a.m.	Mr. F. C. W. Capps at 1 p.m.	—
Aural Department	Mr. S. R. Scott at 1 p.m.	Mr. T. H. Just at 9 a.m.	—	Mr. S. R. Scott at 9 a.m.	Mr. T. H. Just at 1 p.m.	—
Ophthalmic Department	Mr. Rupert Scott at 1 p.m.	Mr. Foster Moore at 1 p.m.	—	Mr. Rupert Scott at 1 p.m.	Mr. Foster Moore at 1 p.m.	—
Skin Department .	—	Dr. Roxburgh at 9 a.m.	Dr. Roxburgh at 9 a.m.	—	Dr. Roxburgh at 9 a.m.	—
Psychological Department	—	—	—	—	Dr. Porter Phillips at 1.30 p.m.	—
*Electrical Department	Dr. Cumberbatch. Males at 1 p.m.	Dr. Cumberbatch. Females at 1 p.m.	—	Dr. Cumberbatch. Males at 1 p.m.	Dr. Cumberbatch. Females at 1 p.m.	—
*X-Ray Department	9.30 a.m. and 1.30 p.m.	9.30 a.m. and 1.30 p.m.	9.30 a.m.	9.30 a.m. and 1.30 p.m.	9.30 a.m. and 1.30 p.m.	9.30 a.m.
*Exercises and Massage Department	9 a.m. and 1.30 p.m.	9 a.m. and 1.30 p.m.	9 a.m. to 1 p.m.	9 a.m. and 1.30 p.m.	9 a.m. and 1.30 p.m.	9 a.m. to 1 p.m.
Diseases of Children	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.	Dr. Harris at 9 a.m.
Dental Department	Mr. Fairbank at 9 a.m.	Mr. Coleman at 9 a.m.	Mr. Hankey at 9 a.m.	Mr. Fairbank at 9 a.m.	Mr. Coleman at 9 a.m.	Mr. Hankey at 9 a.m.
Tuberculosis Dispensary	—	12.30 p.m. to 2.30 p.m. †5 to 7 p.m.	—	—	New cases only from 12.30 p.m. 3 to 4 p.m.	—
Venereal Department	Men, 5 to 7 p.m.	Women and children, 4 to 6 p.m.	—	Men, 12 to 2 p.m.	Women and children, 12 to 2 p.m.	—
Plastic Surgery .	Sir Harold Gillies at 2 p.m.	—	—	—	—	—
Neurological Clinic	—	—	—	Dr. Hinds-Howell at 1.30 p.m.	—	—

March, 1933 (revised).

* Patients are not seen in these Departments unless recommended by the Medical Staff.

† These hours are intended for patients who cannot attend at mid-day.

RECENT ADDITIONS TO LIBRARY.

ABDOMEN.

COPE: *Early Diagnosis of the Acute Abdomen.* Sixth edition.

ANATOMY.

GRAY: *Anatomy, Descriptive and Applied.* Twenty-fifth edition.
McGREGOR: *A Synopsis of Surgical Anatomy.*

BACTERIOLOGY.

JORDAN: *General Bacteriology.* Tenth edition.

BIO-CHEMISTRY.

CAMERON and GILMOUR: *The Bio-chemistry of Medicine.*

BRAIN AND SPINAL CORD.

CUSHING: *Papers relating to the Pituitary Body, Hypothalamus and Parasympathetic Nervous System.*
Poliomyelitis: A Survey.

CHEST.

STRAUB: *Surgery of the Chest.*

DIAGNOSIS.

HUTCHISON and HUNTER: *Clinical Methods.* Ninth edition, revised.
SICARD and FORESTIER: *The Use of Lipiodol in Diagnosis and Treatment.*

FRACTURES.

OGILVIE: *Treatment of Fractures.*

GENETICS.

HOGBEN: *Genetic Principles in Medicine and Social Science.*

HEART.

BRAMWELL, C.: *Heart Disease.*
LEWIS: *Diseases of the Heart.*

HISTORY OF MEDICINE AND SURGERY.

NEWMAN: *The Rise of Preventive Medicine.*
POWER: *A Short History of Surgery.*

MEDICAL EDUCATION.

Final Report of the Commision on Medical Education, New York.

MEDICINE.

BEAUMONT: *Medicine.*
CECIL: *A Text-book of Medicine.* Second edition.
MAJOR: *Classic Descriptions of Disease.*
Medical Annual, 1933.
NEWMAN: *Medical Emergencies.*

NERVOUS SYSTEM.

SHARP: *Neurological Effects of Syphilis.*

OBSTETRICS AND GYNÆCOLOGY.

BOURNE and WILLIAMS: *Recent Advances in Obstetrics and Gynæcology.* Third edition.

PHARMACOLOGY.

CLARK: *Mode of Action of Drugs on Cells.*

PHYSIOLOGY.

LOVATT EVANS: *Starling's Principles of Human Physiology.* Sixth edition.
WINTON and BAYLISS: *Human Physiology.*

PSYCHIATRY.

CANNON and HAYES: *The Principles and Practice of Psychiatry.*

PSYCHOLOGY.

McDOUGALL: *An Outline of Psychology.* Fifth edition.

RADIUM.

WARD and SMITH: *Recent Advances in Radium.*

RECTUM.

GABRIEL: *The Principles and Practice of Rectal Surgery.*

SURGERY.

BICKHAM: *Operative Surgery.* Vol. VII.
MILES and WILKIE: *Operative Surgery.*

CHANGES OF ADDRESS.

ANDERSON, H. G., Henry Lester Institute of Medical Research, Shanghai, China.
BARNSLEY, Major R. E., R.A.M.C., Officers' Mess, R.A.M.C., The Citadel, Cairo.
BURGESS, W. J., Lauriston House, Chipping Ongar, Essex.
DE CAUX, F. P., 26, Abbey Lodge, Regent's Park, N.W. 8.
MILLER, T. M., 4, Chilston Road, Tunbridge Wells. (Tel. Tunbridge Wells 22.)
OAKLEY, W. G., 114, Harley Street, W. 1. (Tel. Welbeck 2157.)
POLLARD, W. H., 60, Fountain Road, Edgbaston, Birmingham.
WATERS, A. B., 10, Christchurch Road, Winchester.
WATKYN-THOMAS, F. W., 8, Wimpole Street, W. 1.
WINDLE, R. W., 33, Cromwell Road, Hove, Sussex. (Tel. Hove 1263.)
WOLFERSTAN, K., Riverdale, Sunbury-on-Thames, Middlesex.

APPOINTMENT.

NELSON, H. P., M.B., B.Chir.(Cantab.), F.R.C.S., appointed Assistant Surgeon to the Hospital for Consumption and Diseases of the Chest, Brompton, S.W.

BIRTHS.

FORDHAM.—On June 17th, 1933, at The Royal Northern Hospital, to Molly and Michael Fordham—a son.
HALL-SMITH.—On May 26th, 1933, at Logmore, Cheam, Surrey, to Kathleen (*née* Gaston), wife of Dr. Cedric Sharr Hall-Smith—a son (Alexander Michael).
HANCOCK.—On May 30th, 1933, at 7, Portland Place, W. 1, to Blue (*née* Barnes), wife of Dr. P. E. Thompson Hancock—a daughter.
ROBINSON.—On June 5th, 1933, at 11, Parklands, Surbiton, to Freeda, wife of R. D. Robinson, M.B., B.S., of 7, Richmond Road, Kingston—a daughter.
ROLES.—On June 12th, 1933, at 61, Springfield Road, St. John's Wood, N.W. 8, to Joan, wife of Dr. Francis Roles—a son.
THROWER.—On June 11th, 1933, at 8, Belvidere, Weymouth, to Violet Beatrice (Betty), wife of Dr. W. R. Thrower—a daughter.
YOUNG.—On May 29th, 1933, at 20, Devonshire Place, W. 1, to Stella (*née* Robinson), wife of Dr. F. H. Young—a son.

MARRIAGES.

GAISFORD—GAISFORD.—On June 1st, 1933, at St. Ives, Cornwall, Wilfrid F. Gaisford, M.D., M.R.C.P., to Mary, eldest daughter of Capt. and Mrs. Gaisford, of St. Ives.
DE LABILLIERE—LAWLEY.—On June 8th, 1933, at St. George's, Hanover Square, W., Surgeon-Lieutenant Claude Denis Delacour de Labilliere, Royal Navy, younger son of the Rev. C. E. D. and Mrs. de Labilliere, of Stinsford Vicarage, Dorchester, to Frances Christine Wright, younger daughter of the late Arthur Ernest Lawley and Mrs. E. W. Lawley, of Ash, Stedham.
PRICE—CLARK.—On June 1st, 1933, at the Memorial Chapel, The University, Glasgow, by the Rev. J. G. Clark, M.A., assisted by the Rev. S. W. Wilson, M.A., Roy Kemball Price, M.D., M.R.C.P., eldest son of Mr. and Mrs. C. R. Price, Beacon Lodge, Crouch End, London, to Mary Campbell Clark, M.B., Ch.B., eldest daughter of Rev. J. G. and Mrs. Clark, 158, Hill Street, Glasgow.
RECORDON—ROBERTSON.—On June 1st, 1933, at the Old Church, Chelsea, by the Rev. P. Ardagh-Walter, Esmond G. Recordon, M.A., M.B., third son of the late David Recordon and Mrs. Recordon, to Frieda, second daughter of the late Henry Robertson and Mrs. Robertson.

DEATHS.

BANATVALA.—On July 2nd, 1932, Sir Hormasjee E. Banatvala, C.S.I.
CODY.—On May 28th, 1933, at a nursing home, after a short illness, Dr. William Ernest Cody, of 190, London Road, Twickenham.
FLETCHER.—On June 7th, 1933, after an operation, Sir Walter Morley Fletcher, K.B.E., C.B., Sc.D., M.D., F.R.S., of 15, Holland Street, Kensington, W. 8, aged 59.
GOW.—On June 19th, 1933, at Porlock, William John Gow, M.D., F.R.C.P., aged 70 years.
HARDY.—On June 14th, 1933, at 6, Cleveland Road, Ealing, W. 13, Lt.-Col. F. W. Hardy, R.A.M.C.(ret.).

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C.1.*

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